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BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of

Group Art Unit: 3772

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FOR: Cheek Path Airway and Cheek Pouch Anchor

APPELLANT'S AMENDED OPENING BRIEF

This brief has been amended in response to NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF mailed June 30, 2008.

The Status of Claims section of this brief includes an identification of the appealed claims at page 1, line 12, in response to objection 2.

At pages 4 - 14, in the Summary of Claimed Subject Matter section of this brief, each and all appealed claims are mapped to the specification in response to objection 4.

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1 APPELLANT'S OPENING BRIEF

2 (i) REAL PARTY IN INTEREST. The sole real party in interest is Applicant Lowell R.
3 Wedemeyer.

4 (ii) RELATED APPEALS AND INTERFERENCES. There are no related appeals or
5 interferences.

6 (iii) STATUS OF CLAIMS.

7 Claims 1 through 43 have been stated in the application.

8 Claims 1 - 32 have been withdrawn from consideration pursuant to the election
9 required in the First Office Action.

10 Claims 33 - 43 remain pending in this application.

11 Claims 33 - 43 have been finally rejected in the Office Action mailed May 13, 2008.

12 Claims 33 - 43 are being appealed herein.

13
14 (iv) STATUS OF AMENDMENTS.

15 Applicant filed original claims 1 - 38.

16 Applicant filed preliminary amendments on April 22, 2004, which have been entered.

17 Pursuant to the election requirement imposed by the Examiner, Applicant elected
18 claims 33 - 38 and withdrew from consideration claims 1 - 32.

19 Applicant added new claims 39 and 40 and a substitute specification by amendment
20 filed May 18, 2007. They have been entered.

21 Applicant filed new claims 41 - 43 by amendment together with a request for further
22 examination on September 12, 2007. They have been entered.

23 Claims 33 - 43 remain pending in this application.

24
25 (v) SUMMARY OF CLAIMED SUBJECT MATTER.

26
27 The Cheek Pouch Anchor. The "cheek pouch anchor" is claimed in independent claims 33
28 and 41. The cheek pouch anchor is a spring element formed of a resilient filament coiled
29 into a plurality of loops. See Figures 1 and 2, elements 28, 28a, 28b, 28c, 28d, 29 and 29a.

30 The plurality of loops enables the resilient filament to expand and contract within a
31 user's cheek pouch so that the anchor dynamically maintains a span across the gap between
32 a user's upper and lower teeth as the user's jaws open and close. See figure 3. Similarly,
33 the anchor can maintain a span across the gap between a user's lips as the lips open and

close. See figure 3.

Consequently, the cheek pouch anchor maintains its position within the cheek pouch, resists slipping between biting surfaces of the user's teeth, slipping out of the user's mouth between the user's lips, or slipping into the user's throat. The anchor fits within a one of a user's two cheek pouches. It has the structural strength to maintain itself within that cheek pouch with a work piece attached while the user's jaws and lips are free to open and close and without interfering with the user's tongue. See Figures 2, 3; specification para. [0031]; claims 33, 34, and 41.

The cheek pouch anchor actually is part of the solution to larger problems concerning the stabilization of "cheek-side" airways that are intended to dwell within a user's mouth. The devices of Nelson (U.S. Patents 4,170,230, 4,261,354, 4,262,666, and 4,289,172), that Applicant believes are most closely related prior art, are stabilized cheek-side airways which have these problems. See specification ¶¶ [0018] - [0020], [0054] and [0058] - [0064]. [Note 1] The anchor solution unexpectedly turned out to have additional capabilities and applications. See claims 36 - 40, 42 and 43.

The term "user's cheek pouch" is defined in ¶ [0041] of the specification as follows: "User's cheek pouch" lies between the inner wall of one of such user's two cheeks and the cheek-adjacent side of such user's dental arches, gums and teeth. A user's cheek pouch extends along such user's anterior-posterior ("vertical") body axis between the junctures of such user's mandibular and maxillary dental arches with such user's inner cheek wall. Such cheek pouch extends along such user's dorsal-ventral body axis approximately from a user's front teeth to the general area of such user's most-dorsal teeth and rear-jaw gap. The configuration of a user's cheek pouch dynamically alters as the user's jaws and lips open and close. A user has two cheek pouches located on opposing sides of a user's mouth." [Note 2]

See the dotted outline of a user's cheek pouch which is element 50 in Figure 3, described at

1 All references herein are to the substitute specification, clean version, filed May 18, 2007, which includes the paragraph numbering inserted by the PTO for publication of the original application.

2 The phrases "user's cheek pouch" and "a user's cheek pouch" are explicitly defined in the singular, with an explicit notation that a user has two cheek pouches. This explicitly defined term then is used in the claims.

1 Specification, ¶ [0176].

2 Please note that the biting ("occlusal") surfaces of a user's teeth are beyond the limits
3 of a "user's cheek pouch", and so are the occlusal surfaces of a user's lips. The cheek
4 pouch anchor is designed to avoid the biting surfaces of a user's teeth as well as the user's
5 tongue and lips. See Figure 3, element 50, specification ¶ [0030], p. 6, lines 12 - 16, and ¶
6 [0076].

7 The anchor is designed, depicted and claimed "to allow a user's jaws and lips to fully
8 close while said spring element is within a user's cheek pouch." Figure 3; Claims 39 and 40,
9 substitute specification page 34, lines 10 - 11 and page 35, lines 9 - 10; and Claims 41 and
10 43 in the Request for Further Examination filed September 12, 2007, pages 17 - 18. When
11 emplaced within a user's cheek pouch, as in figure 3, the cheek pouch anchor does not
12 encumber the opening and closing of a user's lips. Thus, the emplaced anchor does not
13 aggravate the lip-sealing problems of airways that are described in specification ¶¶ [0065] -
14 [0066].

15
16 Adjustability of the Cheek Pouch Anchor. In claims 36 and 39 the size of the anchor as
17 a whole can be adjusted for different sized mouths. It is an objective of the invention that
18 lay persons be capable of inserting, adjusting, using and removing it by themselves, and
19 adjusting it for a particular user's comfort. Specification ¶¶ [0079] - [0080]. The mechanism
20 of adjustability is explained by reference to figure 1 at specification ¶ [0192], page 21, lines
21 21 - 24. In claim 36 the whole anchor can be adjusted by mutually converse adjustments of
22 two or more of the plurality of loops from which the whole anchor is formed. Claim 39
23 requires adjustment of the loop span of at least one of the plurality of loops, relative to the
24 loop span of at least one other loop, to translate into adjustment of the span size of the
25 whole spring element.

26
27 The Cheek Pouch Anchor Combined With Additional Elements. Applicant also claims a
28 combination of the cheek pouch anchor with two distinct types of additional elements.

29 Claims 35 and 42 combine the elements of the cheek pouch anchor with a conduit for
30 a fluid that Applicant calls a "cheek path airway." See Figure 2, elements 1 - 6. The cheek
31 path airway is shaped to carry air or other fluids in either direction along a "cheek path."
32 The "cheek path" traverses between a user's lips, through a user's cheek pouch, curves
33 through a user's "rear-jaw gap" behind a user's rear-most teeth, and reaches into the

airspace above a user's tongue at the rear of a user's mouth. See Figure 3. The cheek path airway attaches to the cheek pouch anchor and is stabilized within a user's mouth by the anchor while the user's jaws remain free to open and close.

Claims 38, 40 and 43 combine the elements of the cheek pouch anchor with a capacity to carry a substance and release that substance within a user's mouth.

APPEALED CLAIMS MAPPED TO SPECIFICATION

CLAIM ON APPEAL

MAPPING TO SPECIFICATION

(Substitute Specification, clean version, filed May 18, 2007, "Spec.")

Independent Claim 33: (Original)
A cheek pouch anchor, for placement within a user's cheek pouch to maintain positioning of a work piece in a user's mouth while a user's jaws, inter occlusal space, and lips open and close, comprising:

"User's cheek pouch" is defined at Spec. ¶ [0041] and illustrated as dotted line 50 in Figure 3, as explained at Spec. ¶ [0194].

The occlusal (biting) surface of a user's tooth is illustrated as element 43 in Figure 9, and listed at Spec. ¶ [0168].

Inter occlusal space referenced in Spec. ¶ [0063].

A spring element adapted

Spring element described, Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figures 1 and 2, elements 28, 28a, 28b, 28c, and 28d. See also Spec. ¶ [0085] - [0087], [0140] - [0147], [0192] - [0194], [0219].

- to be placed within a user's cheek pouch, and

Placement "within" a user's cheek pouch is described, Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figure 3, dotted line 50, Spec. ¶ [0176], and spring elements 28 - 28d, Spec. ¶ [0140] - [0145];

- to compress as a user's jaws close, and

Compression as user's jaws close is described in Spec. ¶ [0030], [0063], [0064], [0072]; and Fig. 3, (showing spring element 28 compressed within user's cheek pouch 50).

- to resiliently expand so as to form and maintain a span bridging across a user's inter occlusal space and a user's lip opening formed as a user's jaws and lips open and close, and

Resilient expansion is described in Spec. ¶ [0030], [0063], [0064]; see Fig. 1, elements 28, 28a, 28b, 28c, and 28d, identified at Spec. ¶ [0140] - [0145], and described at Spec. ¶ [0192], p. 21, lines 16 - 19.

- to receive joinder to a work piece, and

Joinder to a work piece is described in Spec. ¶ [0031]; Spring element is slidably attached to a work piece (a cheek path airway), as illustrated in Figs. 1, 2 and 3, Spec. ¶ [0085] - [0087], [0192] - [0194], especially Spec. ¶ [0192], p. 21, l. 16 - 19; p. 22, lines 3 - 6, and "lacing holes", element 17, Spec. ¶ [0128], [0217].

having structural strength sufficient, when joined to a work piece, to maintain placement within a

Anchor placement and operation are described in Spec. ¶ [0029] - [0031], [0034], [0060], [0064], [0218], [0219], and Fig. 3, described in Spec. ¶ [0194]. This "structural strength" phrase appeared

user's cheek pouch while a user's lips and jaws open and close.
[end of claim 33]

CLAIM ON APPEAL

Dependent Claim 34: (Original)
The cheek pouch anchor of claim 33 wherein said spring element is formed of at least one of the following:

metal,
plastic,
resilient monofilament plastic
line.

CLAIM ON APPEAL

Dependent Claim 35: (Original)
The cheek pouch anchor of claim 33 further comprising:

said cheek pouch anchor is joined with a conduit for a fluid, which conduit is adapted for placement at least partially in a user's cheek pouch.

CLAIM ON APPEAL

Dependent Claim 36: (Original) The cheek pouch anchor of claim 33 wherein said spring element comprises:

a resilient filament

- which is configured into a plurality of connected loops, each loop having a loop span size, and

-said plurality of loops

in this original claim 33 as filed with the original patent application.

MAPPING TO SPECIFICATION

Spec. ¶ [0219]; These three items appeared in original claim 34 as filed in the original application. The specification has been amended to include "metal" at Spec. ¶ [0219], p. 29, lines 26 - 27.

MAPPING TO SPECIFICATION

"Conduit" is defined at Spec. ¶ [0222] - [0224]. Spec. ¶ [0031]; the spring element is slidably attached to a cheek path airway, as illustrated in Figs. 1, 2 and 3, Spec. ¶ [0085] - [0087], [0192] - [0194], especially Spec. ¶ [0192], p. 21, l. 16 - 19; p. 22, lines 3 - 6, and "lacing holes", element 17, Spec. ¶ [0128], [0217]. The cheek path airway is a "conduit for a fluid", to wit, "air" as specially defined at Spec. ¶ [0044].

MAPPING TO SPECIFICATION

"Filament" is defined at Spec. ¶ [0226]; resilience specified at Spec. ¶ [0030], p. 6, l. 7 - 12; Spec. ¶ [0064]
Plurality of loops, each with loop span size, illustrated in Figs. 1, 2, 3, loop elements, 28a - 28d, described at Spec. ¶ [0192], p. 21, lines 16 - 20;

The whole spring element is 28 in Figs. 1, 2 and 3,

are combined to form a whole spring element with a whole spring element span size, and

- each one of said plurality of loop span sizes is mutually adjustable relative to at least one other of said loop span sizes, such that an increase or decrease in the loop span size of any one of said plurality of loops results in a converse decrease or increase in the loop span size of at least one other of said plurality of loops, thereby enabling adjustment of said whole spring element span size by said mutual adjustment within said plurality of loop span sizes.

[end of claim 36]

CLAIM ON APPEAL

Dependent Claim 37: (Original)
The cheek pouch anchor of claim 33, improved to dispense a substance within a user's mouth, wherein said spring element is adapted to receive impregnation or coating with a substance which is to be released in a user's mouth.

CLAIM ON APPEAL

Independent Claim 38: (Original) A cheek pouch anchor, for placement within a user's cheek pouch, comprising:

- A spring element adapted

- to be placed within a user's cheek pouch, and

- to compress as a

with whole spring element span size. See also Spec. ¶ [0063], [0064].

This mechanism of adjustability is explained at Spec. ¶ [0192], p. 21, lines 21 - 24, by reference to Fig. 1. See also objectives of the invention, Spec. ¶ [0079], [0080].

NOTE: A second mode of adjustment, by altering the location of lacing holes 17 in portion 3 of the airway tube to alter the curves in the cheek pouch anchor, is disclosed at Spec. ¶ [0219], p. 29, lines 25 - 26. This second mode does not necessarily involve "converse decrease or increase" of one loop span size relative to another loop span size.

MAPPING TO SPECIFICATION

For impregnation or coating with substance to be released in user's mouth, see Spec. ¶ [0032].

MAPPING TO SPECIFICATION

"User's cheek pouch" is defined at Spec. ¶ [0041] and illustrated as dotted line 50 in Figure 3, as explained at Spec. ¶ [0194].

Spring element disclosed at Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figures 1 and 2, elements 28, 28a, 28b, 28c, and 28d, Spec. ¶ [0085] - [0087], [0140] - [0145], [0192] - [0194], [0219].

Spring element placed within a user's cheek pouch, Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figure 3, dotted line 50, Spec. ¶ [0176], and spring elements 28 - 28d, Spec. ¶ [0140] - [0145];

Compression as user's jaws close is described in

user's jaws close, and

- to resiliently expand so as to form and maintain a span

- bridging across such user's inter occlusal space as such user's jaws open, and

- bridging across such user's lip opening formed as such user's lips open, and
 - to receive

impregnation or coating with a substance which is to be released within such user's mouth,

whereby said spring element is enabled to maintain its placement within a user's cheek pouch and to release such substance while such user's lips and jaws remain free to open and close. [end of claim 38]

CLAIM ON APPEAL

Independent Claim 39. (Added by amendment, May 17, 2007) An adjustable cheek pouch anchor, for placement within a user's cheek pouch to maintain positioning of a work piece in a user's mouth while a user's jaws, inter occlusal space, and lips open and close, comprising:
a spring element formed of a resilient filament

sized to fit within a user's cheek pouch, and

Spec. ¶ [0030], [0063], [0064], [0072]; Spec. ¶ [0030], [0063], [0064]; and Fig. 3, (showing spring element 28 compressed within user's cheek pouch 50).

Resilient expansion is described at Spec. ¶ [0030], [0063], [0064]; See Fig. 1, elements 28, 28a, 28b, 28c, and 28d, identified at Spec. ¶ [0140] - [0145], and described at Spec. ¶ [0192], p. 21, lines 16 - 19. Inter occlusal space is described at Spec. ¶ [0063].

Spring element 28 is illustrated within user's cheek pouch 50, relative to user's upper and lower lips 31 and 32, in Fig. 3, described at Spec. ¶ [0194].

Impregnation or coating with substance to be released in user's mouth is described at Spec. ¶ [0032].

This "whereby" phrase was in this original claim 38 as filed in the original application.

MAPPING TO SPECIFICATION

"User's cheek pouch" is defined at Spec. ¶ [0041] and illustrated as dotted line 50 in Figure 3, as explained at Spec. ¶ [0194].

Spring element disclosed at Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figures 1 and 2, elements 28, 28a, 28b, 28c, and 28d, Spec. ¶ [0085] - [0087], [0140] - [0147], [0192] - [0194], [0219].

Placement "within a user's cheek pouch" is described at Spec. ¶ [0030]; The spring element is illustrated when sized to fit within one of a user's cheek pouches, Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figure 3, dotted line 50, Spec. ¶ [0176], and

having a dynamic span
that is resiliently
expandable within a
user's cheek pouch to
maintain a bridge
across a user's inter
occlusal space and lip
opening that form as a
user's jaws open, and
that is flexibly
compressible to allow
a user's jaws and lips
to fully close while said
spring element is
within a user's cheek
pouch, and

capable of receiving
attachment of a work piece, and

having structural strength that
is sufficient for said spring
element to maintain itself,
with a work piece attached to
it, within a user's cheek
pouch while a user's jaws
open and close; and

said resilient filament

is configured into a plurality of
connected loops

each such loop having
a loop span size, and
each such loop span
size having a range of
expansion and
compression, and

said plurality of connected
loops form a whole spring
element having a whole
spring element span size,
and

spring elements 28 - 28d, Spec. ¶ [0140] - [0145];

Dynamic span is described, Spec. ¶ [0063], [0064],
[0072], [0176].

Resiliently expandable and compressible within a
user's cheek pouch, described at Spec. ¶ [0030],
[0063], [0064]; and Fig. 3, (showing spring element
28 compressed within user's cheek pouch 50 with
jaws and lips closed, except for airway projecting
through lips). See Spec. ¶ [0065] - [0068]
concerning lip-sealing around airway.
Spanning across the user's Inter occlusal space is
described at Spec. ¶ [0063], [0064].

Spring element 28 within user's cheek pouch 50, is
illustrated relative to user's closed jaws and closed
upper and lower lips 31 and 32, in Fig. 3, described
at Spec. ¶ [0194].

Joinder to a work piece is described at Spec. ¶
[0029] and [0031], and illustrated in Figs. 1 and 2,
wherein the work piece is a cheek path airway,
drawing elements 1 - 5, further described at Spec.
¶ [0192]. The "cheek path airway" is described at
Spec. ¶ [0023] - [0026].

Anchor placement and operation are described in
Spec. ¶ [0029] - [0031], [0034], [0060], [0064],
[0218], [0219], and Fig. 3, described Spec. ¶
[0194]. This "structural strength" phrase appeared
in original claim 33 as filed with the original patent
application.

"Filament" is defined at Spec. ¶ [0226]; resilience
specified at Spec. ¶ [0030], p. 6, l. 7 - 12; Spec. ¶
[0064]

A plurality of loops, each with loop span size, is
illustrated in Figs. 1, 2, 3, loop elements, 28a - 28d,
described at Spec. ¶ [0192], p. 21, lines 16 - 20;

The whole spring element is 28 in Figs. 1, 2 and 3,

said whole spring element span size having a range of expansion and compression, and

said range of expansion and compression of least one of said loop span sizes of said plurality of connected loops is adjustable relative to at least one other of said loop span sizes, and

said connected loops translate an adjustment in said range of expansion and compression of the loop span size of at least one of said plurality of connected loops into an adjustment in said range of expansion and compression of said whole spring element span size.

[end of claim 39]

CLAIM ON APPEAL

Independent Claim 40. (Added by amendment May 17, 2007.) A cheek pouch anchor, for placement within a user's cheek pouch and releasing a substance in a user's mouth, comprising:

A spring element

sized to fit within a user's cheek pouch, and

having a dynamic span that is resiliently

with whole spring element span size. See also Spec. ¶ [0063], [0064].

For range of expansion and compression, see Spec. ¶ [0030], [0063], [0064].

A mechanism of adjustability is explained at Spec. ¶ [0192], p. 21, lines 21 - 24, by reference to Fig. 1. See also objectives of the invention, Spec. ¶ [0079], [0080].

A second mode of adjustment, by altering the location of lacing holes 17 in portion 3 of the airway tube to alter the curves in the cheek pouch anchor, is disclosed at Spec. ¶ [0219], p. 29, lines 25 - 26.

MAPPING TO SPECIFICATION

"User's cheek pouch" is defined at Spec. ¶ [0041] and illustrated as dotted line 50 in Figure 3, as explained at Spec. ¶ [0194].

Spring element disclosed at Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figures 1 and 2, elements 28, 28a, 28b, 28c, and 28d.. Spec. ¶[0085] - [0087], [0140] - [0147], [0192] - [0194], [0219].

Placement "within a user's cheek pouch" is described at Spec. ¶ [0030]; The spring element is illustrated when sized to fit within one of a user's cheek pouches, Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figure 3, dotted line 50, Spec. ¶ [0176], and spring elements 28 - 28d, Spec. ¶ [0140] - [0145];

Dynamic span is described, Spec. ¶ [0063], [0064], [0072], [0176].

expandable within a user's cheek pouch to maintain a bridge across a user's inter occlusal space and lip opening that form as a user's jaws open, and that is flexibly compressible to allow a user's jaws and lips to fully close while said spring element is within a user's cheek pouch, and

having the capability to carry a substance, and

having structural strength that is sufficient for said spring element, while carrying the substance, to maintain itself within a user's cheek pouch while a user's jaws open and close, and having the capability to release the some portion of the substance into the user's mouth.

[end of claim 40]

CLAIM ON APPEAL

Independent Claim 41. (Added by amendment Sept. 12, 2007). A cheek pouch anchor, for placement within a user's cheek pouch to stabilize a work piece in a user's mouth, comprising:
A spring element

sized to fit within one of a user's cheek pouches, and

Resiliently expandable and compressible within a user's cheek pouch, described at Spec. ¶ [0030], [0063], [0064]; and Fig. 3, (showing spring element 28 compressed within user's cheek pouch 50 with jaws and lips closed, except for airway projecting through lips). See Spec. ¶ [0065] - [0068] projecting through lips). See Spec. ¶ [0065] - [0068] concerning lip-sealing a

Spanning across the user's Inter occlusal space is described at Spec. ¶ [0063], [0064].

Spring element 28 within user's cheek pouch 50, is illustrated relative to user's upper and lower lips 31 and 32, in Fig. 3, described at Spec. ¶ [0194].

Capability to carry a substance described, Spec. ¶ [0032].

Anchor placement and operation are described in Spec. ¶ [0029] - [0031], [0034], [0060], [0064], [0218], [0219], and Fig. 3, described Spec. ¶ [0194]. This "structural strength" phrase appeared in original claim 33 as filed with the original patent application.

Release of a substance in the user's mouth described at Spec. ¶ [0032].

MAPPING TO SPECIFICATION

"User's cheek pouch" is defined at Spec. ¶ [0041] and illustrated as dotted line 50 in Figure 3, as explained at Spec. ¶ [0194].

Spring element disclosed at Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figures 1 and 2, elements 28, 28a, 28b, 28c, and 28d..
Spec. ¶[0085] - [0087], [0140] - [0147], [0192] - [0194], [0219].

Placement "within a user's cheek pouch" is described at Spec. ¶ [0030], [0064], p. 12, l. 15 - 22. The spring element is illustrated when sized to fit within one of a user's cheek pouches, Figure 3, dotted line 50, Spec. ¶ [0176], and spring elements

having a dynamic span such that

said spring element resiliently expands within one or more of a user's cheek pouches to maintain a bridge across a user's inter occlusal space and lip opening that form as a user's jaws open, and said spring element flexibly compresses to allow a user's jaws and lips to fully close while said spring element is within one or more of a user's cheek pouches, and

having the capability to receive attachment to a work piece, and

having structural strength that is sufficient for said spring element, with a work piece attached, to maintain itself within one or more of a user's cheek pouches while a user's jaws open and close.

[end of claim 41]

CLAIM ON APPEAL

Dependent Claim 42. (Added by amendment Sept. 12, 2007). A cheek pouch anchor as in claim 41, further comprising:

said cheek pouch anchor is joined with a conduit for a fluid, which conduit is configured to enable placement of it at least partially in one or more of a user's cheek pouches.

28 - 28d, Spec. ¶ [0140] - [0145];

Dynamic span is described, Spec. ¶ [0063], [0064], [0072], [0176].

Resiliently expandable and compressible within a user's cheek pouch, described at Spec. ¶ [0030], [0063], [0064]; and Fig. 3, (showing spring element 28 compressed within user's cheek pouch 50 with jaws and lips closed, except for airway projecting through lips). See Spec. ¶ [0065] - [0068] concerning lip-sealing around the airway.

Spanning across the user's Inter occlusal space is described at Spec. ¶ [0063], [0064].

Spring element 28 within user's cheek pouch 50, is illustrated relative to user's upper and lower lips 31 and 32, in Fig. 3, described at Spec. ¶ [0194].

Joinder to a work piece is described at Spec. ¶ [0029] and [0031], and illustrated in Figs. 1 and 2, wherein the work piece is a cheek path airway, drawing elements 1 - 5, further described at Spec. ¶ [0192]. The "cheek path airway" is described at Spec. ¶ [0023] - [0026].

Anchor placement and operation are described in Spec. ¶ [0029] - [0031], [0034], [0060], [0064], [0218], [0219], and Fig. 3, described Spec. ¶ [0194]. This "structural strength" phrase appeared in original claim 33 as filed with the original patent application.

MAPPING TO SPECIFICATION

"Conduit" is defined at Spec. ¶ [0222] - [0224]. Spec. ¶ [0031]; the spring element is slidably attached to a cheek path airway, as illustrated in Figs. 1, 2 and 3, Spec. ¶ [0085] - [0087], [0192] - [0194], especially Spec. ¶ [0192], p. 21, l. 16 - 19; p. 22, lines 3 - 6, and "lacing holes", element 17,

Spec. ¶ [0128], [0217]. The cheek path airway is a "conduit for a fluid", to wit, "air" as specially defined at Spec. ¶ [0044].

CLAIM ON APPEAL

Independent Claim 43. (Added by amendment Sept. 12, 2007) A cheek pouch anchor, for placement within a user's cheek pouch and releasing a substance in a user's mouth, comprising:
A spring element

sized to fit within one of a user's cheek pouches, and

having a dynamic span such that

said spring element resiliently expands within one or more of a user's cheek pouches to maintain a bridge across a user's inter occlusal space and lip opening that form as a user's jaws open, and said spring element flexibly compresses to allow a user's jaws and lips to fully close while said spring element is within one or more of a user's cheek pouches, and

having the capability to carry a substance, and

MAPPING TO SPECIFICATION

"User's cheek pouch" is defined at Spec. ¶ [0041] and illustrated as dotted line 50 in Figure 3, as explained at Spec. ¶ [0194].

Spring element disclosed at Spec. ¶ [0030], [0064], p. 12, l. 15 - 22; Figures 1 and 2, elements 28, 28a, 28b, 28c, and 28d.. Spec. ¶[0085] - [0087], [0140] - [0147], [0192] - [0194], [0219].

Placement "within a user's cheek pouch" is described at Spec. ¶ [0030], [0064], p. 12, l. 15 - 22. The spring element is illustrated when sized to fit within one of a user's cheek pouches, Figure 3, dotted line 50, Spec. ¶ [0176], and spring elements 28 - 28d, Spec. ¶ [0140] - [0145];

Dynamic span is described, Spec. ¶ [0063], [0064], [0072], [0176].

Resiliently expandable and compressible within a user's cheek pouch, described at Spec. ¶ [0030], [0063], [0064]; and Fig. 3, (showing spring element 28 compressed within user's cheek pouch 50 with jaws and lips closed, except for airway projecting through lips). See Spec. ¶ [0065] - [0068] concerning lip-sealing around the airway.

Spanning across the user's Inter occlusal space is described at Spec. ¶ [0063], [0064].

Spring element 28 within user's cheek pouch 50, is illustrated relative to user's upper and lower lips 31 and 32, in Fig. 3, described at Spec. ¶ [0194].

Capability to carry a substance described at Spec. ¶ [0032].

having structural strength that is sufficient for said spring element, while carrying the substance, to maintain itself within one or more of a user's cheek pouches while a user's jaws open and close, and having the capability to release a portion of the substance into the user's mouth.

[end of claim 43]

Anchor placement and operation are described in Spec. ¶¶ [0029] - [0031], [0034], [0060], [0064], [0218], [0219], and Fig. 3, described Spec. ¶¶ [0194]. This "structural strength" phrase appeared in original claim 33 as filed with the original patent application.

Release of a substance in the user's mouth described at Spec. ¶¶ [0032].

(vi) GROUND OF REJECTION TO BE REVIEWED ON APPEAL.

Applicant appeals from all grounds of rejection. They are as follows:

Claims 33-36 and 39 - 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Leal (U.S. Patent 5,199,872).

Claims 37-38 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leal (U.S. Patent 5,199,872) in view of Diaz (U.S. Patent 4,041,937).

(vii) ARGUMENT.

Summary of Argument.

Applicant amended to add new claims 41 - 43 in order to focus certain issues for appeal. Applicant's argument initially focuses upon claims 41 - 43 for simplicity. Similar though not precisely identical issues arise in each of claims 33 - 40.

This appeal shows that the Examiner repeatedly has factually misstated the function and structure of the cited prior art, Leal. The Examiner imputes characteristics that are incompatible with Leal's intended function and that might occur, if at all, only in a malfunctioning Leal device. The Examiner imputes to Leal's device characteristics that it simply does not have. The Examiner improperly imputes characteristics to Leal through speculative hypotheses that lack proper factual foundation in either cited prior art or the application. The Examiner repeatedly substitutes his own idiosyncratic definitions in place of, and inconsistently with, the explicit definitions in Applicant's specification.

Summary Re Anticipation Under 35 U.S.C. 102(b).

ISSUE 1 Summary. In claims 41 - 43 Applicant's structural limitation "sized to fit **within one of** a user's cheek pouches" is a closed-ended limitation that structurally distinguishes Applicant's claimed "cheek pouch anchor" from the device of Leal (U.S. Patent 5,199,872). Applicant expressly declared this phrase to be closed-ended when amending to add claims 41 - 43. (Request for Further Examination, filed September 12, 2007, pp. 2-3). Applicant uses the word "within," in its plain, standard, dictionary meaning "inside the limits of; not beyond." Applicant's specification, ¶ [0041] specially defines the limits of a "user's cheek pouch." This claim limitation negates anticipation by Leal's structure. The Examiner improperly refuses to accord any weight to Applicant's claim limitation "sized to fit **within one of** a user's cheek pouches."

Leal's structure cannot fit **within one of** a user's two cheek pouches, and also cannot fit **within two of** a user's cheek pouches, but can only fit **into** two cheek pouches while

1 simultaneously extending beyond two cheek pouches. Leal's u-shaped upper and lower
2 sections (12, 14) and flexible connections (24) necessarily must simultaneously fit *into* both
3 of a dental patient's cheek two pouches, between the patient's lips and gums around the
4 outside of the patient's dental arches. (Leal's Figures 1, 2, 4 and 5, and specification, col.
5 1, line 50 - col. 2, line 17; col. 2, line 58 - col. 3, line 1; col. 3, line 50 - col. 4, line 13).
6 Leal's forwardly projecting tabs (32, 24) project out between a patient's lips so those tabs
7 can be grasped, compressed, and released by the dentist's fingers (col. 4, l. 25 - 35; col. 5,
8 l. 15 -30). Thus Leal's tabs extend beyond the limits of both of a user's two cheek pouches,
9 as those limits are defined in Applicant's specification ¶ [0041] and depicted by dotted line
10 50 in Applicant's figure 3. In addition, Leal's tongue depressor (26, 28, 30) extends across
11 the patient's dental arches over the patient's tongue, beyond the limits of two of the "user's
12 cheek pouches" as those limits are defined in Applicant's specification, ¶ [0041].

13 The Examiner incorrectly construes the word "within" to mean "simultaneously inside
14 and outside," which is repugnant to the plain, standard meaning of "within." Final Office
15 Action, May 13, 2008, p. 2. The Examiner then incorrectly construes Applicant's closed-
16 ended phrase "within one of" a user's cheek pockets" to mean that the claimed anchor
17 simultaneously occupies both of a user's two cheek pockets, in direct contradiction of the
18 plain meaning of Applicant's claim language. *Id.*

19 If there are any material structural differences between a claim and the prior art, that
20 prior art does not anticipate. None of Applicant's claims 33 - 43 includes any structure
21 equivalent to Leal's tabs (32, 34) or to Leal's tongue depressor (26, 28, 30). The phrase
22 "within one cheek pouch" in claims 41 - 43 therefore does not read on Leal and negates
23 anticipation by Leal.

24
25 ISSUE 1.1 Summary. Applicant's claims 33 and 38 use the syntax, " ... comprising: A
26 spring element adapted to be placed ***within a user's cheek pouch***". The phrase "a
27 user's cheek pouch" in normal patent parlance has the open-ended meaning "one or more
28 cheek pouches." The word "within" still has the closed-ended meaning "inside the limits of;
29 not beyond." By special definition in specification ¶ [0041] a user has two cheek pouches.
30 Thus, the phrase "within a user's cheek pouch" following the transition word "comprising" has
31 the partially open meaning "inside and not beyond the limits of one or two cheek pouches."

32
33 When Applicant's claim phrase "**a** user's cheek pouch" is read as the partially open

phrase "one or two cheek pouches," the claim still does not read on Leal because Leal does not possess that structural limitation. Leal's device cannot fit **within two** cheek pouches, but can only fit **into** two cheek pouches while also necessarily extending beyond them.

Applicant's claims 39 and 40 also use similarly partially-open syntax, "sized to fit **within a** user's cheek pouch," and have a similar meaning.

The phrase "within **a** user's cheek pouch" in claims 33 - 40 does not read on Leal's structure.

ISSUE 2 Summary. In claims 41 - 43, Leal's device also is structurally distinguished from Leal by Applicant's claim limitation:

"A spring element ... having a dynamic span such that

said spring element flexibly compresses to allow a user's jaws and lips to fully close while said spring element is within one or more of a user's cheek pouches..."

Applicant's anchor is claimed to fit and to compress within a user's cheek pouch. When within the user's cheek pouch, as claimed, Appellant's anchor is compressed by the soft tissues of the user's cheek pouch. The limits of a user's cheek pouch as defined in specification ¶ [0041] do not include the biting surfaces of the user's teeth, nor the occlusal surfaces of a user's lips.

The claimed compressibility of Applicant's anchor allows the user to fully close jaws and lips while the anchor is within the user's cheek pocket. This structurally distinguishes the claimed anchor from Leal's device. Leal repeatedly states that his device prevents a dental patient's mouth from closing. Leal's tabs (32, 34) project out between a patient's lips for the dentist to grasp with fingers to compress. That is, Leal's device is a dental retractor. It is intended to be compressed by a dentist's fingers using tabs (32, 34) for insertion into a patient's mouth, whereupon the dentist releases tabs (32, 34) allowing resilient, flexible connections (24) to expand Leal's upper and lower sections (12, 14) and thereby "prevent" a patient's mouth from closing during dental procedures. (Leal, col. 2, l. 58 - col. 3, l. 17; col. 5, l. 15 - 30; figures 1, 2, and 4; claims 1, 10 - 12.)

The Examiner speculates, without any evidence, that a dental patient could close the patient's mouth by using teeth or lips to compress Leal's tabs (32, 34). The Examiner's speculations concerning compression of Leal's tabs (32, 34) by lips or teeth directly contradict Leal's many express statements in both his specification and claims that his device

maintains a dental patient's mouth open and "prevents" it from closing. It is not possible for a patient to bring teeth to bear on Leal's tabs (32, 34) when the device is inserted into the patient's mouth as Leal says he intends. Lips are not as strong as fingers so there is no inference that a patient's lips could compress tabs (32, 34) merely because a dentist's fingers could.

Even if the Examiner's speculation were true (which the Examiner has not proven), Applicant's anchor, as claimed, has no equivalent of Leal's tabs (32, 34). Therefore, Applicant's claims do not read on the Examiner's speculative construction of Leal.

The biting surfaces of a user's teeth and the occlusal surfaces of a user's lips are beyond the limits of a "user's cheek pouch" as defined in Applicant's specification and used in the claims. Applicant expressly claims that his anchor is compressible "while said spring element is within" the user's cheek pocket, in which position the occlusal surfaces of the user's lips and teeth cannot come to bear to compress Applicant's claimed anchor.

Leal does not anticipate Applicant's claim that Applicant's anchor is compressible to allow the user's jaws and lips to fully close while the anchor is within a user's cheek pouch.

ISSUE 3 Summary. Applicant's claim limitation "a conduit for a fluid" does not read on Leal's cotton rolls that cushion Leal's appliance (10) and absorb saliva. Leal, col. 4, l. 51 - 55. Applicant's specification ¶ [0224] explicitly defines the word "conduit" for use in the claims as follows: "Conduit" means a hollow tube or channel capable of conveying fluids along its longitudinal axis, which axis may be curved [with additional elaboration]." Applicant's explicit definition is consistent with definitions in several, different dictionaries. Leal's cotton roll is not a "conduit" according to Applicant's explicit definition in the specification, nor is it a conduit according to the plain meaning of "conduit" in dictionaries.

The Examiner explicitly violated the rule of law that an applicant is entitled to be his own lexicographer. The Examiner rejected claims 35 and 42 by improperly substituting the Examiner's own, unreasonably broad, idiosyncratic definition as follows:

"Examiner has given the term conduit its broadest, most reasonable definition, which is an element with a hole therethrough that can transfer air or fluid, which is the cotton surround the spring element (40)."

The Examiner's excessively broad definition eliminates the semantic distinction between "hole" and "conduit." It is not consistent either with the plain meaning of dictionary definitions of "conduit" or with Applicant's explicit definition in the specification.

ISSUE 4 Summary. In claims 33 - 38, the Examiner incorrectly refused to consider Applicant's claim phrase "adapted to" and all limiting language following that phrase. The Examiner states:

"The "adapted to ..." language has not been considered since it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138." Final Office Action mailed May 13, 2008, pp. 4-5, and p. 6.

There is no such legal principle. In *MPEP* § 2173.05(g) the USPTO has adopted the modern view that the phrase "adapted to ..." can be employed following the word "comprising" to state a valid functional limitation. The Examiner materially misstates the current state of the law in general and misstates *In re Hutchinson* in particular. *In re Hutchinson* disregarded the phrase "adapted for ..." because the phrase was in a preamble before the transitional word "comprising," not in the body of the claim. Applicant uses the phrase in the body of claims, after the word "comprising."

ISSUE 5 Summary. Leal's device does not anticipate the particular kind of structural adjustability of the cheek pouch anchor that is stated in claims 36 and 39. The Examiner's argument for rejection is that "it would be obvious to one of ordinary skill in the art to bend the wires of the Leal device in order to better fit the user." Final Office Action mailed May 13, 2008, p. 3. That is, the rejection is on the formal ground of anticipation, but the Examiner's supporting rationale is obviousness. The Examiner confuses inherency for purposes of anticipation with obviousness. The Examiner fails to apply the proper test for inherency, fails to make out inherency, and fails to show anticipation. The Examiner's obviousness argument does not meet the strict test of inherency for the purpose of anticipation. See *MPEP* 2112, *subd.* IV. Where a characteristic must be achieved by optimization of a prior art device, that characteristic is not necessarily present in the prior art and therefore is not inherent. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955 (Fed Cir. 1993); *In re Oelrich*, 666 F.2d 578, 581-582, 212 USPQ 323, 326 (CCPA 1981).

The Examiner also fails to show *prima facie* obviousness. The Examiner states a premise that it would be obvious for one of ordinary skill to adjust Leal's device by bending it. But the Examiner then improperly leaps to the unfounded, incorrect conclusion that it would be obvious to bend Leal's wires *according to the particular structural mechanism that*

1 *Applicant claims* for achieving adjustability in the cheek pouch anchor.

2 The Examiner inconsistently presumes both that Leal's wire possesses sufficient
3 ductility to enable bending of Leal's upper and lower sections (12, 14) to adjust Leal's wire to
4 patient deformities, and also that the wire simultaneously has resilience to return to its
5 original shape when deformed. Final Office Action, May 13, 2008, pp. 2 - 4. Resilience
6 counters ductility (or malleability). The resilient-versus-ductile properties of Leal's wire would
7 have to be optimized to achieve a special balance between resilience and ductility, if such a
8 balance could be achieved at all. Leal specifies resilience but does not disclose any such
9 special balance between resilience and ductility. Such a balance is not an inherent feature
10 of Leal's device, so a capacity to accept ductile bending is not inherent. The Examiner
11 deconstructs Leal's device, element by element, and then contorts individual elements, but
12 fails to consider how Leal's device as a whole would malfunction when re-constructed of the
13 Examiner's contorted individual elements.

14 The Examiner not only fails to show inherency, but also fails to show *prima facie*
15 obviousness. It would not be obvious to adjust the whole span of Leal's device according to
16 the teaching of Applicant's claims. Assuming (without conceding) that Leal's device
17 necessarily would sustain ductile bending while remaining resilient, a person of ordinary skill
18 in the art seeking to alter the whole span of Leal's device would be motivated to ductilely
19 bend Leal's device in the most simple, obvious place, at flexible connections (24), to achieve
20 a simple, predictable result. Such a person of ordinary skill would be motivated to avoid
21 using complex, ductile bending of Leal's u-shaped upper and lower sections (12, 14) to
22 adjust the whole span of Leal's device. If there were to be bending, there still would be a
23 strong motivation to bend Leal's sections (12, 14) in such a way as to avoid altering the
24 whole span. This is because such complex, ductile bending predictably would cause a
25 cascade of adverse changes in other parts of Leal's device which would strongly tend to
26 impair the intended function of Leal's device. If, in the course of bending Leal's upper and
27 lower sections (12, 14) to accommodate a patient's over-bite or other deformity, the whole
28 span of Leal's device (10) were to be altered then that altered whole span would only be
29 coincidental. The Examiner concedes that such bending of Leal's sections (12, 14) "may not
30 be the easiest and most effective way" to adjust the whole span of Leal's device. Final Office
31 Action mailed May 13, 2008, p. 4. That shows non-obviousness, not *prima facie*
32 obviousness.
33

ISSUE 6 Summary. Claims must be construed as a whole, giving weight to each and all limitations. When each of Applicant's claims 33 - 36 and 39 - 42 is viewed as a whole, Leal does not anticipate any of those claims as a whole. The Examiner has contorted Leal on an element- by-element basis, but when one attempts to view as a whole the Examiner's various contortions of Leal's device it is rendered unrecognizable and unfit for its intended purpose. The Examiner then improperly substitutes his own unreasonable definitions for the definitions in Applicant's specification in order to read Applicant's claims on the Examiner's contorted constructions of Leal.

Complexity is not a requirement for patentability. It is incorrect to hold that an invention was obvious when made, simply because the invention is simple in nature and is easily understood when described in a patent specification. Some of the simplest advances have been the most nonobvious. When the art in question is relatively simple, as Appellant's solution is here, the opportunity to judge by hindsight is particularly tempting so particular awareness of that risk is important here. It still is the law under the U.S. Supreme Court's recent decision that an examiner must guard against slipping into the use of hindsight and must guard against the temptation to read into prior art the teachings of the invention in issue. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed. 2d 705, 82 USPQ2d(BNA) 1385 (U.S. Sup. Ct., 2007).

Summary Re Rejections Under 35 U.S.C. § 103 For Obviousness.

ISSUE 7 Summary. Claims 37, 38 and 43, to a cheek pouch anchor combined with a capacity to carry and release a substance in a user's mouth, are not rendered obvious by Leal (U.S. Patent 5,199,872) in view of Diaz (U.S. Patent 4,041,937). The Examiner's rationale is that Leal anticipates all of the elements of Applicant's cheek pouch anchor that are stated in claims 37, 38 and 43, but that Leal lacks the added element which comprises a capacity to carry and release a substance in the user's mouth. The Examiner combines Diaz (U.S. Patent 4,041,937) with Leal only to demonstrate that additional substance-carrying- and-releasing capacity in prior art.

The Examiner is in error that Leal anticipates the elements of the cheek pouch anchor stated in claims 37, 38 and 43, for all the reasons stated with respect to Issues 1 - 4 and 6 above. Because Leal does not anticipate the claimed elements of the cheek pouch anchor, and Diaz does not cure this lack in Leal, therefore the combination of Leal with Diaz does not

render claims 37, 38 and 43 obvious.

ARGUMENT RE REJECTIONS UNDER 35 U.S.C. § 102(b) FOR ANTICIPATION

ISSUE 1. In claims 41 - 43, does Applicant's limitation "sized to fit ***within one of*** a user's cheek pouches" read on Leal (U.S. Patent 5,199,872)? (bold, italic emphasis added).

Argument On Issue 1.

Anticipation Under 35 U.S.C. 102(b). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q. 2d (BNA) 1051, 1053 (Fed. Cir. 1987).

The Examiner's Argument Contradicts the Plain Meaning of "Within": Leal's Device Cannot Fit "Within" Either One or Two Cheek Pouches.

The word "within" means "in the compass of; not beyond", or "in the limits of, not going beyond". *Random House Webster's Dictionary*, 1993, *Random House, Inc.*; *Chambers's Twentieth Century Dictionary*, 1965, *W.&R. Chambers, Ltd., first American edition*. "Within" does not mean "simultaneously inside and outside the limits of." "Within" does not mean "into".

Applicant's structural limitation "sized to fit ***within one of*** a user's cheek pouches" is a closed-ended limitation that distinguishes Applicant's claimed "cheek pouch anchor" from the device of Leal (U.S. Patent 5,199,872). It negates anticipation. Leal's structure is incapable of fitting "within" one of a user's two cheek pouches, or even "within" both of a user's two cheek pouches. This is because Leal's "u-shaped" structure necessarily must simultaneously fit into both of a patient's two cheek pouches, while Leal's tabs (32, 24) project out of the cheek pouches between a patient's lips, and Leal's tongue depressor crosses a patient's dental arches over a patient's tongue which is beyond the cheek pouches. (Leal's Figures 1, 2, 4 and 5, and specification, col. 1, line 50 - col. 2, line 17; col. 2, line 58 - col. 3, line 1; col. 3, line 50 - col. 4, line 13.) Leal's tabs (32, 24) are an essential, integral element of structure that enables compression of Leal's device by a dentist's fingers for insertion into and removal from a patient's mouth. Leal states that when his device is in the patient's mouth it maintains the mouth open and prevents the mouth from closing. The operation of Leal's device is explained in detail in Appendix 1 to this brief.

Applicant's Response filed May 18, 2007, pp. 3 - 4, pointed out that Applicant specially defines the anatomical term "user's cheek pouch" in Applicant's specification, ¶ [0041] and illustrates it with the dotted line 50 in Figure 3, as described in specification ¶ [0176]. That May 18, 2007 Response also pointed out that the term "user's cheek pouch" is defined in the singular. The Examiner's next Office Action again rejected all claims, stating incorrectly,

"claiming the device fits in one cheek pouch does not limit it to not be able to fit in the other cheek pouch, because there is no negative limitation preventing it from being within both cheek pouches. Office Action mailed November 9, 2007. [Note 3] Applicant filed new claims 41 - 43 in order to focus this precise issue in claims that unequivocally negate the Examiner's assertion. Applicant explicitly declared that the newly-stated structural limitation "sized to fit within one of a user's cheek pouches" is semantically closed-ended. Request for Further Examination, filed September 12, 2007, p. 3.

Applicant declines to disclaim the plural interpretation of "a user's cheek pouch" in claims 33 - 40, but rather Applicant has filed new, more narrow claims 41 - 43 while still insisting that broader claims 33 - 38 also adequately distinguish Leal's structure. Compare *KCJ Corporation v. Kinetic Concepts, Inc.*, 223 F. 3d 1351, 1356, 55 USPQ2d (BNA) 1835 (Fed. Cir. 2000) (indefinite article "a" following open-ended word "comprising" means "one or more"; but applicant may disclaim before the PTO a plural interpretation of indefinite article "a").

The Examiner's final Office Action then improperly rejected Applicant's new closed-ended limitation in claims 41 - 43, stating:

"Applicant argues the Examiner has improperly disregarded a closed limitation of sized to fit within one of a user's cheek pouches. Applicant has not claimed **only one cheek pouch**; a device can be sized to fit within one cheek pouch while simultaneously fitting into another cheek pouch." Final Office Action mailed May 13, 2008, p. 2. (emphasis added).

Both of the Examiner's two statements are incorrect.

In the Examiner's first statement ("Applicant has not claimed only one cheek pouch"), the Examiner's adds the redundant word "only" to the already-closed phrase "**within one of a user's cheek pouches**." "Only" adds nothing to the already-closed limitation. Using the

3 Applicant follows the preferred practice of claiming what the invention is, not the disfavored practice of claiming what the invention is not.

1 standard dictionary meaning, Applicant's phrase "within one cheek pouch" means "inside the
2 limits of and not beyond one cheek pouch."

3 The Examiner's construction "fit within one ... while simultaneously fitting into another
4 ...", is logically inconsistent with and is repugnant to the plain meaning of the word "within."

5 Leal's device cannot even fit **within two** cheek pouches, but can only fit **into** two cheek
6 pouches while also extending beyond them.

7 The Examiner's second statement ("a device can be sized to fit within one cheek pouch
8 while simultaneously fitting into another cheek pouch") also is ambiguous. It has two
9 possible meanings. Both possible meanings are incorrect.

10 Meaning 1. A single macroscopic device cannot **simultaneously** display two different
11 physical sizes, a smaller size limited to fit inside the limits of and not beyond one of a user's
12 cheek pouches, and a larger size that exceeds the size of one of a user's cheek pouches and
13 thus spills over into the second cheek pouch. When read in this sense, the Examiner's
14 second statement is internally contradictory.

15 Meaning 2. It would be possible to place Applicant's claimed anchor between the
16 user's lips and front teeth, where the anchor would lie across the boundary between the
17 user's two cheek pouches and thus would "simultaneously" lie partially in one cheek pouch
18 and partially in the other cheek pouch. However, Applicant's claims do not read on Leal even
19 if the one-pouch-sized anchor were to be **placed** so that the anchor lies partly within one
20 cheek pouch and partly within the other cheek pouch. The particular location of **placement**
21 of the anchor in a user's mouth does not alter the **structural limit** on the anchor's inherent
22 compressibility, that it compress to allow a user's lips and jaws to fully close. No matter
23 where placed, the structure of Applicant's anchor, as claimed in claims 41 - 43, still has the
24 inherent capacity to fit within the size of **one** cheek pouch, whereas Leal's device never can
25 be so compressed to fit within **one** cheek pouch. If read in this second sense, the
26 Examiner's statement (that Applicant's anchor can simultaneously fit into two cheek pouches)
27 again fails to demonstrate anticipation by Leal's device. Rather, it shows an improper focus
28 by the Examiner upon one aspect of the performance of the claimed anchor rather than upon
29 plain, claimed, structural differences. *MPEP § 2114; Hewlett-Packard v. Bausch & Lomb,*
30 *909 F. 2d 1464, 1468; 15 U.S.P.Q.2d (BNA) 1525.*

31 The Wide Range of Expansion of the Claimed Anchor Structurally Distinguishes the
32 Claimed Anchor from Leal's Device.

33 The size of Applicant's anchor is limited in claims 41 - 43 so that the anchor's structure

1 inherently is capable of a degree of compression that enables the claimed anchor to fit
2 **within** one of a user's cheek pouches, whether the user's jaws and lips are open or closed.
3 This is because Leal's u-shaped upper and lower sections (12, 14) and resilient connections
4 (24) and tabs (32, 34) necessarily must simultaneously fit *into* both of a user's cheek
5 pouches and cannot be compressed to fit *within* one cheek pouch.

6 This claimed compressibility of Applicant's anchor is an inherent structural difference
7 from Leal's device that negates anticipation by Leal. See *MPEP* § 2114.

8 Apparatus claims cover what a device is, not what the device does. An invention need
9 not operate differently than prior art to be patentable, it need only be structurally different.
10 *Hewlett-Packard Co. v. Bausch & Lomb Incorporated*, 909 F.2d 1464, 1468, 15 USPQ2d
11 (BNA) 1525 (Fed. Cir. 1990).

12 The claimed cheek pouch anchor also is capable of adjustment that would enable it to
13 expand from a one-pouch size to reach into a second pouch so the anchor could be within
14 the two cheek pouches, not just within one cheek pouch. The structural mechanism of
15 adjustability is claimed in claims 36 and 39. This is another claimed, structural feature that
16 Leal's device does not possess.

17 If the Examiner's second statement ("a device can be sized to fit within one cheek
18 pouch while simultaneously fitting into another cheek pouch") is read in this sense
19 (compressible to enable fit within one cheek pouch while expansible to enable fit within two
20 cheek pouches), it still does not demonstrate anticipation by Leal's device. Instead it shows
21 that the cheek pouch anchor inherently can be adjusted do two things that Leal's structure
22 cannot do, either fit within one cheek pouch or fit within two cheek pouches. The Examiner
23 again is incorrectly focusing upon one aspect of the performance of the claimed anchor
24 rather than upon plainly claimed structural differences. *MPEP* § 2114; *Hewlett-Packard v.*
25 *Bausch & Lomb*, *supra*.

26
27 **Sub-Issue 1.1** In claims 39 - 40, does Applicant's claim limitation "sized to fit within a
28 user's cheek pouch" read on Leal's device?

29
30 **Argument on Sub-Issue 1.1.** Applicant's limitation in claims 39 - 40, "sized to fit
31 within a user's cheek pouch" follows the open-ended transition word "comprising." In normal
32 patent parlance the article "a" is read as open-ended to mean that the cheek pouch anchor
33 must be sized to fit within "one or more cheek pouches". In this Application it would mean

1 "one or two" cheek pouches because a user, by definition, has only two cheek pouches. Yet
2 even when Applicant's claim limitation "sized to fit within a user's cheek pouch" is read as the
3 open-ended "one or two cheek pouches" it still does not read on Leal because that is a
4 structural limitation that Leal's device does not possess — a capacity either to fit **within one**
5 pouch or by adjustment to fit **within two** cheek pouches. As explained above, Leal's device
6 can only fit **into**, but not **within**, two cheek pouches.

7 See also in claims 33 and 38, "A spring element adapted to be placed **within a user's**
8 **cheek pouch ...**".

9 Would a device such as Leal's infringe upon Applicant's claims 33 and 38 - 40 when
10 the claim phrase "a user's cheek pouch" is read to mean "one or two user's cheek pouches"?
11 Plainly not, due to more than one structural difference.

12 Leal states that Leal's device is intended to be compressed by force imposed on Leal's
13 tabs (32, 34), but Applicant's claimed anchor has no structural element equivalent to Leal's
14 tabs. Recognizing this, the Examiner speculates that a patient could compress Leal's tabs
15 (32, 34) using either teeth or lips. Assuming for the sake of argument, but without
16 conceding, that the Examiner's speculation were true, Leal still would not be anticipating
17 because Applicant's claims have no structure equivalent to Leal's tabs.

18 The Examiner's speculation that a patient could compress Leal's device with a patient's
19 lips or teeth contradicts Leal's specification. Leal repeatedly states that his device prevents
20 the closing of a patient's mouth and maintains the patient's mouth in an open condition, as
21 showed in detail in Appendix 1. By distinction, Applicant's claimed anchor is explicitly limited
22 in claims 39-40 to be "flexibly compressible to allow a user's jaws and lips to fully close while
23 said spring element is within a user's cheek pouch ... ". This claimed compressibility of
24 Applicant's anchor is distinctly, structurally different from Leal's device.

25 Both of these claimed **structural** differences exist regardless of whether Leal's tabs
26 (32, 34) are compressed by a dentist's fingers, as Leal explicitly intends, or could be
27 compressed by a patient's teeth as the Examiner incorrectly speculates.

28 The differences in compressibility are discussed in more detail in Issue 2 below.
29

30 **ISSUE 2.** In claims 41 - 43, does the following combination of limiting claim phrases
31 read upon Leal's device: "A spring element
32 **sized to fit within one of a user's cheek pouches**, and
33 having a dynamic span such that ... **said spring element flexibly compresses to**

1 ***allow a user's jaws and lips to fully close while said spring element is within one***
2 ***or more of a user's cheek pouches...?"***
3

4 **Sub-ISSUE 2.1.** In claims 39 and 40, does the following combination of limiting claim
5 phrases read upon Leal's device:

6 "a spring element formed of a resilient filament

7 ***sized to fit within a user's cheek pouch***, and

8 having a dynamic span

9 that is resiliently expandable within a user's cheek pouch to maintain a bridge
10 across a user's inter occlusal space and lip opening that form as a user's jaws
11 open, and

12 ***that is flexibly compressible to allow a user's jaws and lips to fully close***
13 ***while said spring element is within a user's cheek pouch, ..."***
14
15

16 **Sub-ISSUE 2.2.** In claims 33 - 37, does the following combination of limiting claim
17 phrases read upon Leal's device:

18 "A spring element adapted

19 - to be placed ***within a user's cheek pouch***, and

20 - ***to compress as a user's jaws close***, and

21 - to resiliently expand so as to form and maintain a span bridging across a user's inter
22 occlusal space and a user's lip opening formed ***as a user's jaws and lips open and***
23 ***close, ..."***
24

25 **Sub-ISSUE 2.3.** In claim 38, does the following combination of limiting claim phrases
26 read upon Leal's device:

27 "A spring element adapted

28 - ***to be placed within a user's cheek pouch***, and

29 - ***to compress as a user's jaws close, ..."***
30

31 **Argument on Issue 2 and Related Sub-Issues.**

32 In claims 41 - 43, Leal's device is structurally distinguished by Applicant's claim
33 limitations "A spring element

1 **sized to fit within one of a user's cheek pouches**, and
2 having a dynamic span such that

3

4 **said spring element flexibly compresses to allow a user's jaws and lips to**
5 **fully close while said spring element is within one or more of a user's**
6 **cheek pouches..."**

7 The similar claim limitations in claims 33 - 40 also structurally distinguish Leal's device.

8 Issue 2 and its subparts concern the proper factual interpretation of Leal's device as
9 actually disclosed by Leal's specification, figures and claims. The Examiner repeatedly has
10 factually misstated the function of Leal's structure. The Examiner imputes to Leal's device
11 characteristics that it simply does not have, and characteristics that are incompatible with
12 Leal's intended function and would occur, if at all, only in a malfunctioning Leal device. The
13 Examiner states:

14 "Applicant argues Leal's tabs (32, 34), would not contact the teeth of the user,
15 however, the intended use is for the user's teeth not to contact the tabs; but it would be
16 obvious that one's teeth could be able to contact the tabs, depending upon the size and
17 placement of the device. Moreover, Leal's device could be compressed by the lips of
18 the user or by the compression of the jaw when the user's closes his/her mouth." Final
19 Office Action mailed May 13, 2008, p. 2.

20 Applicant traverses the Examiner's statements as factually unsupported speculations that
21 contradict Leal's descriptions of his device and its functions.

23 The Examiner Ignores Significantly Limiting Language Of Claims 39 - 43.

24 The Examiner states, incorrectly:

25 "Applicant argues the Examiner incorrectly asserts that Applicant has not claimed that
26 the claimed invention is compressed by the soft tissues of the user's mouth. However,
27 Applicant merely claims the invention is adapted to compress as the user's jaw closes
28 and expand as the user's jaw expands." Final Office Action mailed May 13, 2008, p. 2.

29 Applicant's actual limitation in claims 39 - 43 is:

30 "A spring element

31

32 having a dynamic span such that

33

1 said spring element flexibly compresses to allow a user's jaws and lips to fully
2 close ***while said spring element is within one or more of a user's cheek***
3 ***pouches, ...***" (bold, italic emphasis added).

4 This is a structural limitation on the degree of compressibility of the claimed structure of the
5 anchor that distinguishes the claimed anchor from Leal's device. Leal repeatedly states that
6 his device prevents a patient's mouth from closing and maintains the mouth open. Leal's
7 statements necessarily require that Leal's device inherently resists compression by the
8 tissues of a patient's mouth.

9 The "soft tissue" topic arose when the Examiner asserted in the Office Action of July
10 19, 2007, pp. 2 - 3, that Leal's device

11 "can be compresses by the mouth if the jaw applies force even though the intended
12 use is to hold the mouth open. If two fingers can compress the device, the much
13 stronger jaw can compress it."

14 Applicant pointed out that the Examiner had factually misstated Leal. Applicant showed with
15 detailed references to Leal's specification and claims that Leal's u-shaped upper and lower
16 sections 12 and 14 are intended by Leal to bear upon the soft tissues of a patient's cheek
17 pouches, and not upon the harder biting surfaces of a patient's teeth. Applicant argued, with
18 detailed references to Leal, that Leal's device plainly exploits the tenderness and sensitivity
19 of soft tissues to prevent a user's mouth from closing. Request for Further Examination,
20 September 12, 2007, pp. 3 - 6. These detailed references appear in Appendix 1 below.

21 Applicant then filed claims 41 - 43 to the cheek pouch anchor to focus the semantic
22 issues. Claims 41 - 43 state, among other things, that "said spring element flexibly
23 compresses to allow a user's jaws and lips to fully close ***while said spring element is***
24 ***within one or more of a user's cheek pouches...***"

25 Applicant explicitly defines a "user's cheek pouch" to be framed by the soft tissues of a
26 user's mouth and the cheek-adjacent side of a user's teeth. Specification, ¶ [0041] and
27 Figure 3, element 50, as described in Specification ¶ [0176]. The biting ("occlusal") surfaces
28 of the user's teeth are beyond the defined limits of the cheek pouch.

29 Therefore, Applicant's claim phrase "compresses to allow a user's jaws and lips to fully
30 close while said spring element is within one or more of a user's cheek pouches" necessarily
31 involves compression by the soft tissues of the user's cheek pouch but does not involve
32 compression by the hard, biting surfaces of a user's teeth or by the occlusal surfaces of a
33 user's lips.

The Claimed Compressibility Of Applicant's Cheek Pouch Anchor While Within A Cheek Pouch Structurally Differs From Leal's Device.

The correct comparative test of the structural ease of compressibility of Applicant's anchor versus Leal's device is compressibility by the power of soft tissues of a user's cheek pouches. Compressibility by the greater power of the hard, biting surfaces of a user's teeth is non-comparable. The critical structural difference in compressibility is that Applicant's anchor does "flexibly compress ... while said spring element in within one or more of a user's cheek pouches." By structural distinction, Leal's device prevents the patient's mouth from closing when Leal's device is inserted into the user's two cheek pouches. Assuming without conceding the Examiner's hypothesis that Leal's device could be compressed by use of the biting surfaces of a user's teeth on Leal's tabs (32, 24), the Examiner's hypothesized compressibility of Leal's device by the greater power of the hard, biting surfaces of a user's teeth would be a structural difference, not a structural equivalence.

The Examiner Contradicts Leal's Specification and Claims When Rejecting Applicant's Claim Limitations "compress as a user's jaws close" and "flexibly compresses to allow a user's jaws and lips to fully close while said spring element is within one or more of a user's cheek pouches."

Leal's specification and claims state many times that his retractor "prevents" a patient's mouth from closing and maintains a patient's mouth open to enable a dentist to perform dental operations. Leal never states that his retractor can be compressed by the biting surfaces of a patient's teeth, nor, indeed, by any other tissues of a patient's mouth. (extensive, detailed citations to Leal in Appendix 1 below).

Applicant specifically traverses the Examiner's speculations that Leal's tabs (32, 34) could be compressed by a patient's lips or by a patient's teeth. The Examiner's speculations are factually unsupported. *MPEP § 2144.03, subd. C*. They are inconsistent with Leal's stated purpose. Leal's tabs (32, 34) are there to provide mechanical advantage enabling compression of Leal's device by the dentist's fingers, not by the patient's teeth or lips.

The Examiner's speculative hypothesis that Leal's tabs (32, 34) could be compressed by a patient's lips not only is contrary to Leal's stated purpose, but also is contrary to the common knowledge that fingers generally have greater compressive power than do lips.

Before a patient could bring the biting surfaces of a patient's teeth to bear on Leal's tabs (32, 34) Leal's device would have to be contorted into a shape or position incompatible

1 with Leal's stated purpose. Leal's u-shaped structure, formed of upper and lower sections
2 (12, 14), leg sections (20, 22), and flexible connections (24), is designed to fit between lips
3 and gums, outside a patient's dental arches, where the biting surfaces of a patient's teeth
4 could not bear on Leal's sections (12, 14) to compress the flexible connections (24). Leal's
5 sections (12, 14) bear on the soft tissues of a patient's cheek pouches, which is why Leal
6 cushions them with cotton rolls. (col. 5, l. 3 - 30). When positioned in a patient's mouth,
7 Leal's tabs (32, 34) project "forwardly", that is, between the patient's lips, so as to be grasped
8 by the dentist's fingers for compression of Leal's upper and lower sections (12, 14) and
9 flexible connections (24).

10 The Examiner's contorted constructions of Leal, in an attempt to achieve compression
11 by the patient's teeth, do not show anticipation of Applicant's claimed cheek pouch anchor.

12 Purely by argument without citation to any prior art, the Examiner incorrectly imputes to
13 Leal's device compressibility by a patient's teeth. Leal's device would be malfunctioning if its
14 resistance to compression were so weak that a patient could compress the Leal device while
15 it is in the patient's mouth.

16 The Examiner argues that some hypothetical patient might forge through pain and
17 injury to compress Leal's device while the device was inserted into the patient's mouth,
18 despite Leal's many statements that Leal's device prevents the patient's mouth from closing
19 and maintains the mouth open. Final Office Action, mailed May 13, 2008, p. 3. This is a
20 purely speculative argument by the Examiner that lacks any supporting citation to other prior
21 art or other evidence. See *MPEP* § 2144.03, *subd. A* (to take official notice of facts
22 asserted to be well-known or common knowledge in the art, such facts must be capable of
23 instant and unquestionable demonstration). The Examiner's personal speculation is not prior
24 art. It does not establish either anticipation or obviousness.

25 The Examiner's Arguments Exceed the Limits of The Inherent Feature Doctrine.

26 The Examiner tacitly but incorrectly applies the inherent feature doctrine, by imputing to
27 the Leal device characteristics that are not disclosed by Leal and that would impair or defeat
28 the stated purpose of Leal.
29

30 To invoke the inherent feature doctrine an examiner must provide evidence that
31 descriptive matter missing from a reference is **necessarily** present in the thing described in
32 the reference; that it may occur or be present under some circumstances is insufficient. See
33 *MPEP* 2112, *subd. IV*. Where a characteristic must be achieved by optimization of a prior art

1 device, that characteristic is not necessarily present in the prior art and therefore is not
2 inherent. *In re Rijckaert*, supra 9 F.3d 1531, 1534, 28 USPQ2d 1955; *In re Oelrich*, 666
3 F.2d 578, 581-582, 212 USPQ 323, 326 (CCPA 1981). See also, *Ex Parte Levy*, 17
4 USPQ2d 1461, 1664.

5
6 The Examiner Confuses The Test for an Inherent Feature, For Purposes of
7 Anticipation, With the Distinctly Different Test for Obviousness.

8 If a proposed modification would render a prior art device unsatisfactory for its intended
9 purpose, then even when evaluating obviousness there is no suggestion or motivation to
10 make the proposed modification. See *MPEP* § 2143.01, subd. V. It necessarily follows that
11 a characteristic that would appear only in a malfunctioning device not only is non-obvious,
12 but also it is not inherent in that device.

13 Even if the Examiner's hypotheses here could be proven true (which the Examiner has
14 not done), they would only show that Leal's device was unsatisfactory for Leal's intended
15 purpose of preventing a dental patient's mouth from closing during the performance of dental
16 procedures. The Examiner's unproven hypotheses cannot show that Leal's device inherently
17 is compressible by soft tissues of a patient's cheek pouches, contrary to Leal's stated intent,
18 so as to render Leal's device anticipatory of Applicant's claimed cheek pouch anchor.

19 For purposes of an obviousness analysis, Leal teaches away from Appellant's device.
20 This is because Appellant's solution (a resilient filament that remains stable within a cheek
21 pouch by expanding and compressing while the user's jaws open and close without any
22 manual intervention by a dentist) would render Leal's device inoperative for Leal's stated
23 purpose. Compare *McGinley v. Franklin Sports*, 262 F.3d 1339, 1354, 60 U.S.P.Q.2d (BNA)
24 1001 (Fed. Cir. 2001) (if references taken in combination would produce "a seemingly
25 inoperative device," then such references teach away from the combination and thus cannot
26 serve as predicates for a prima facie case of obviousness.)

27
28 Even If Leal's Device Could Perform Operations of The Claimed Cheek Pouch Anchor,
29 Leal Still Would Not Anticipate the Claims Because There Are Structural Differences.

30 Even if a prior art device performs all of the functions recited in an apparatus claim, the
31 prior art cannot anticipate the claim if there is any structural difference. *MPEP* § 2114.

32 Therefore, the Examiner's argument that a patient could compress Leal's device using
33 teeth or lips on Leal's tabs (32, 34) would not show that Applicant's claims read on Leal's

1 device, even if the Examiner's argument were factually correct (which it is not as showed by
2 the detailed citations to Leal in Appendix 1 below). Applicant's cheek pouch anchor, as
3 claimed, does not have any structural equivalent of Leal's tabs (32, 34) which are an integral,
4 essential part of Leal's compression mechanism.

5 The Examiner factually misstates Leal by arguing that a dental patient could compress
6 Leal's device by biting down with the patient's teeth upon Leal's tabs (32, 34) while Leal's
7 device was inserted into the patient's cheek pouches. It would be irrelevant (even if it were
8 factually correct which it is not) that a dental patient could use teeth to compress Leal's tabs
9 (32, 34) while Leal's device was inserted into a patient's cheek pouches. The occlusal
10 (biting) surfaces of a patient's teeth are beyond the limits of "a user's cheek pouch" as
11 defined in Applicant's specification ¶ [0041] and depicted as the dotted line 50 in Figure 3.

12 Similarly, even if the Examiner's speculation were factually correct that Leal's device
13 were so easily compressible that a dental patient could compress it with the patient's lips
14 acting upon Leal's tabs (32, 34) (which, according to Leal's specification, is not correct), that
15 still would not mean that Applicant's claims read on Leal's device. Applicant's cheek pouch
16 anchor, as claimed, does not have any structural equivalent of Leal's tabs (32, 34) and the
17 occlusal surfaces of a patient's lips are beyond the limits of "a user's cheek pouch" as
18 defined in Applicant's specification ¶ [0041] and depicted as the dotted line 50 in Figure 3.

19
20 **ISSUE 3.** In claims 35 and 42, can the Examiner properly disregard Applicant's definition of
21 the word "conduit" in Applicant's specification and substitute the Examiner's own,
22 idiosyncratic definition so as to read Applicant's claim limitation "a conduit for a fluid" upon
23 Leal's absorbent cotton?
24

25 **Argument on Issue 3.**

26 Applicant's claim limitation "a conduit for a fluid" does not read on Leal's cotton rolls.
27 Leal's cotton rolls are clamped about Leal's upper and lower sections (12, 14) by Leal's
28 clamping elements (36, 38) and coils (40) before insertion into the patient's mouth; the
29 cotton then remains statically clamped when inside the patient's mouth. Leal, col. 4, l. 36 -
30 col. 5, l. 30. Leal's cotton is not a "conduit" according to Applicant's explicit definition in the
31 specification, nor according to the plain meaning of "conduit" in dictionaries. Leal states that
32 his cotton roll acts as a cushioning and absorbent element. Leal, col. 4, l. 51 - 55. Leal's use
33 of cotton is consistent with common understanding of the action of a cotton roll. Even if one

were to hypothesize that Leal's cotton roll might act as a wick to transfer fluid from one end of the wick to the other end, still it is common knowledge that a wick and a conduit function according to different scientific principles. A wick employs molecular attraction whereas a conduit confines flow induced by gravity or a pressure differential. This is a plain structural difference. *MPEP § 2114*.

Applicant's specification ¶ [0224] explicitly defines the word "conduit" for use in the claims as follows:

[0224] "Conduit" means a hollow tube or channel capable of conveying fluids along its longitudinal axis, which axis may be curved. A conduit may have one or more separate passageways through it and thus have a plurality of longitudinal axial dimensions. The conduit's cross-section may be enclosed (as in a tube by way of non-limiting example), or partially open (as in an open-top channel by way of non-limiting example). The conduit's radial cross-section may have a single-focus radius (circular cross-section) or may have multi-focal radii or variable length radii and thus have a plurality of radial dimensions (oval or other variant shape which can include multi-lateral shapes, that is, a plurality of sides). A conduit's radial cross-section may vary along the conduit's longitudinal axis."

Applicant's explicit definition is consistent with definitions in several, different dictionaries, as showed in the discussion below.

Where the application provides an explicit definition for a term, that definition will control interpretation of the term as it is used in the claim. *MPEP § 2111.01, subd. IV*, citing *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999). The Examiner explicitly violated this rule of law that an applicant is entitled to be his own lexicographer. *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.* 381 F. 3d 1111, 1117; 72 USPQA2d (BNA) 1001 (Fed. Cir. 2004) states:

A patent applicant thus has the flexibility to imbue new or old terms with a different meaning than they would otherwise have to a person of ordinary skill in the art. See *Autogiro Co. of Am. v. United States*, 181 Ct. Cl. 55, 384 F.2d 391, 397 (Ct. Cl. 1967) ("Patent law allows the inventor to be his own lexicographer."). All that is required is that the patent applicant set out the different meaning in the specification in a manner sufficient to give one of ordinary skill in the art notice of the change from ordinary meaning. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994); *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1387-88, 21 U.S.P.Q.2d (BNA) 1383 (Fed. Cir.

1992)."

See MPEP § 2173.01 and MPEP § 2173.05(a).I.

The Examiner rejected claims 35 and 42 by substituting the Examiner's own, inconsistent, unreasonable, idiosyncratic definition as follows:

"The device (10) [of Leal] has a conduit col. 4, lines 56-63) for fluid. Examiner has given the term conduit its broadest, most reasonable definition, which is an element with a hole therethrough that can transfer air of fluid, which is the cotton surround the spring element (40)." Final Office Action mailed May 13, 2008, p. 5.

Thus, the Examiner simply ignored the explicit definition in Applicant's specification.

Ordinarily, an examiner must give words of the claim their broadest reasonable interpretation in light of the specification. This means that words must be given their plain meaning unless the plain meaning is inconsistent with the specification *MPEP § 2111.01, subd. I*. The Examiner's idiosyncratic definition of "conduit" is inconsistent with Applicant's specification. It also is excessively broad and unreasonable when tested by the plain-meaning standard. The Examiner unreasonably eliminates the semantic distinction between "hole" and "conduit."

Applicant's claim limitation "conduit for a fluid" does not read on Leal's cotton rolls.

Applicant's Definition of "Conduit" is Consistent With Dictionary Definitions; The Examiner's Definition Is Not.

Applicant's explicit definition in Specification, para. [0224], is consistent with the ordinary and customary meaning stated in dictionaries that define "conduit" as follows:

"1. a channel for conveying water or other fluid. 2. a tube or trough protecting electric wiring. ORIGIN ME: from OFr., from med. L. conductus, from L. conducere (see conduct)." *Oxford University Press (electronic version supplied with the WordPerfect word processing program, ver. 13, Corel Corporation, 2005).*

"n. [ME. & OFr < L. conductus. pp. of conducere; see CONDUCE]. 1. a pipe or channel for conveying fluids. 2. a tube or protected trough for electric wires. 3 [Archaic], a fountain." *Webster's New World Dictionary of the American Language, College Edition, 1959, The World Publishing Company, Cleveland and New York.*

"1. a channel for conveying fluids. 2. a structure containing ducts for electrical conductors or cables." *Random House Webster's Dictionary, 1993, Random House, Inc., New York.*

"n. a channel or pipe conveying water or other fluid or covering electric wires, etc.: a fountain for supplying the public with water. [Fr. conduit - L. conductus - conducere, to lead.] *Chambers's Twentieth Century Dictionary, 1965, Hawthorne Books, Inc., New York.*

The Examiner's definition, an element with a hole therethrough, is excessively broad and not consistent with these dictionary definitions. The Office Action does not cite any authoritative source for the Examiner's definition. It is idiosyncratic, unreasonably vague, and indefinite.

The Examiner has failed to discharge the Examiner's burden to show that the Examiner's definition of "conduit" is the meaning that a person of ordinary skill in the art in question would have given the word "conduit" at the time the application was filed. *MPEP § 2111.01, subd. III.*

ISSUE 4. In claims 33 - 38, has the Examiner incorrectly refused to consider Applicant's claim phrase "adapted to" and any limiting language following that phrase?

Argument on Issue 4. The Examiner states:

"The "adapted to ..." language has not been considered since it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson, 69 USPQ 138.*" Final Office Action mailed May 13, 2008, pp. 4-5, and p. 6.

The Examiner materially misstates the current state of the law in general and misstates *In re Hutchinson* in particular. There is no such legal principle.

In MPEP § 2173.05(g) the USPTO has adopted the modern view that the "adapted to ..." phrase can be employed to state a valid functional limitation, citing *In re Venezia, 530 F. 2d 956, 189 USPQ 149 (CCPA 1976)*.

In *In re Hutchinson*, the phrase "adapted for" appeared in the "introductory clause" (that is, in the preamble before the word "comprising") of claims 42 and 43 that were at issue there. *In re Hutchinson, 33 C.C.P.A. 879 at 882-883.* Thus, *In re Hutchinson* never has stood for the Examiner's proposition that the phrase "adapted for" has no patentable weight where it is recited in the body of the claim after the word "comprising".

The MPEP does not cite or adopt *In re Hutchinson* for the proposition stated by the Examiner in the instant Office Action. The *In re Hutchinson* discussion of the "adapted for..."

phrase was written in 1946. The Patent Act of 1952 then was enacted. Twice thereafter the Court of Customs and Patent Appeals affirmed use of the phrase "adapted to". *In re Land and Rogers*, 368 F.2d 866, 872, 882, 885, 54 C.C.P.A. 806, 151 U.S.P.Q. 621 (CCPA 1966); *In re Venezia*, supra 530 F.2d 956 at 959 (CCPA 1976). This case law is cited and followed in the most recent edition of the MPEP.

The Examiner's refusal to consider "adapted to ..." and any following language is plain error of law.

ISSUE 5. Does Leal's device anticipate the particular kind of structural adjustability of the cheek pouch anchor that is stated in claims 36 and 39?

Argument Concerning Issue 5.

Applicant claims a cheek pouch anchor (with all the key limitations of such an anchor) having a whole spring element span size, formed by a plurality of connected loops, with each loop having a loop span size. Applicant claims that the whole spring element span size is adjustable by a particular structural mechanism of adjusting the span size of at least one of the plurality of connected loops.

The Examiner rejected claims 36 and 39 to an adjustable cheek pouch anchor solely on grounds of anticipation by Leal. [Note 4]

The Examiner's asserts two arguments for anticipation of claims 36 and 38. The Examiner's first argument plainly, factually misstates Leal's structure and its operation as follows:

"The [Leal] device (10) is formed of metal (col. 1, lines 52 - 55) and configured into a plurality of loops (fig. 1), wherein if one loop has its span increased or decreased it will result in another loop increasing or decreasing span because the device is made of continuous pieces of wire. The plurality of loops is combined for form a spring element (40) with an element span size (fig. 1)." Final Office Action mailed May 13, 2008, p. 5. The Examiner's theory of adjustment of Leal's whole span size by adjustment of coils (40) is

4 Preliminarily, Applicant notes that the rejection of claims 36 and 39 automatically fails if Leal is not anticipatory either (A) because of the cheek pouch anchor's capacity to fit within one cheek pouch, or (B) because of the compressibility of the anchor that allows a user's jaws and lips to fully close while the anchor is in a user's cheek pouch.

unworkable. The Examiner misreads Leal. Leal's coils (40) do not control the whole span of Leal's device (10). The whole span of Leal's device (10) is created by displacement of Leal's u-shaped upper and lower sections (12, 14) and leg portions (20, 24) relative to each other, operating Leal's resilient connections (24) about axis of symmetry A-A (fig. 1). Leal, col. 3, l. 50 - 56. Leal's coils (40) are affixed to Leal's leg portions (20, 22) at points forward of resilient connections (24). Therefore, coils (40) control displacement of clamping element (16) from upper section (12) and control displacement of clamping element (38) from lower section (14). Leal's coils (40) are attached to Leal's clamping elements (36, 38) to statically clamp the cotton rolls that encompass, and cushion, Leal's upper and lower sections (12, 14). Leal, figs. 1, 2; col. 4, l. 36 - col. 5, l. 12. Adjustment of the loop size of Leal's coils (40) would not materially affect the expansion or compression of the whole span of Leal's device (10) about resilient connections (24). (Leal, fig. 1). The only exception Applicant can conceive would be where the loop size of Leal's coils (40) was so unreasonably large that Leal's coils (40) would prevent displacement of Leal's upper and lower sections (12, 14) towards each other under compression about flexible connections (24), but this would defeat Leal's stated purpose because it would hinder, if not entirely block, the dentist from compressing upper and lower sections (12, 14) together.

The Examiner compounds his factually erroneous construction of Leal by confusing anticipation with obviousness:

"In order to form dental devices that conform to the contours of different user's mouths one would have to bend the device into a specific size and shape to fit the user.

Therefore, it would be obvious to one of ordinary skill in the art to bend the wires of the Leal device in order to better fit the user." Final Office Action mailed May 13, 2008, p.

3.

That is, the Examiner rejects on the formal ground of anticipation but the Examiner's supporting argument is obviousness. The difference between arguments for anticipation and obviousness is quite important to proper analysis.

The Examiner leaps from his questionable premise (that it would be obvious for one of ordinary skill to adjust Leal's device by ductilely bending it) to an incorrect, unfounded conclusion that it would be obvious to bend Leal's resilient wire *according to the particular structural mechanism that Applicant claims* for achieving adjustability in the cheek pouch anchor.

The Examiner's obviousness argument does not meet the strict test of inherency for

1 the purpose of anticipation. See *MPEP* § 2112, *subd.* IV. As noted above, where a
2 characteristic must be achieved by optimization of a prior art device, that characteristic is not
3 necessarily present in the prior art and therefore is not inherent. *In re Rijckaert, supra* 9 F.3d
4 at 1534, 28 USPQ2d 1955; *In re Oelrich, supra*, 666 F.2d at 581-582, 212 USPQ 323, 326.
5 The Examiner fails to make out inherency for purposes of anticipation.

6 The Examiner states:

7 "Applicant does not argue the Leal device can have the wires bent to form different
8 sizes and shapes. However, Applicant does argue the adjustments could be
9 cumbersome, maybe not the best way to adjust the device, and maybe not necessarily
10 the best way to adjust the device for different shaped mouths. Even though a process
11 may not be the easiest and most effective way to accomplish a goal does not mean
12 ***that it is not capable of it.*** As Applicant admits, the Leal device ***is capable of having***
13 ***the wires bent to adjust the span size*** and therefore the lease device reads on
14 Applicant's claims ***because it is capable of having the wires bent that would result***
15 ***in an increase or decrease in the loop span size.***" Final Office Action, May 13,
16 2008, p. 4. (bold, italic emphasis added). [Note 5]

5 Applicant does not admit, but rather specifically traverses, the Examiner's
hypothesis that one of ordinary skill would "bend the wires of the Leal device in order
to better fit the user." Elsewhere the Examiner also states, "The Leal device is
intended to be a resilient device in order to hold the user's mouth in an open position
and therefore would remain resilient with the other elements are attached to the device
that assist in the dental procedure." Final Office Action mailed May 13, 2008, p. 3.
Evidently the Examiner is unmindful that his two hypotheses inherently conflict. A
wire's ductility is exploited when bending the wire to impose a semi-permanent new
shape that remains after external force ceases. A wire's resilience is exploited to
restore the wire to its original shape after an external force ceases. That is, ductility
and resilience tend to have mutually exclusive ranges of motion and counter each
other. While it conceivably ***might*** be possible that Leal's wire ***could*** simultaneously
possess the ductility to be reshaped by bending to fit patient deformities and still also
possess the resilience that is essential to Leal's intended purpose, there is no
evidence that Leal's wire does. It is not ***necessarily*** true that Leal's wire would
possess such a specific balance of resilience and ductility. Assuming that such a

(continued...)

1 The Examiner here again confuses the test of inherency for purposes of anticipation with the
2 test for obviousness -- and as a result misapplies both tests. The test for inherency is that a
3 feature **necessarily** is present without having to optimize the prior art device.

4 The very different test for obviousness includes a determination whether one of
5 ordinary skill in the art would perceive a suggestion in Leal, or would have a motivation, to
6 modify the Leal device *according to the particular structural mechanism claimed by Applicant*.
7 Throughout, the Examiner uses the improper test of "capable" (in the sense of potentially
8 possible) rather than the proper test of inherency, "necessarily present."

9 The Examiner does not make out a prima facie case for obviousness of Applicant's
10 adjustment mechanism by merely stating that it would be within the capability of one of
11 ordinary skill in the art to modify Leal by bending its wires to fit a particular patient's mouth.
12 Prima facie obviousness does not arise from mere capability to act without some objective
13 motivation for one of ordinary skill to so act. *MPEP § 2143.01, subd. IV*. Mere capability of
14 one or ordinary skill is not sufficient to establish prima facie obviousness. *MPEP § 2143.01,*
15 *subd. IV*. The Examiner has not showed that one of ordinary skill in the art would have a
16 reasonable expectation of successfully using Applicant's complex mechanism of adjustment
17 on Leal's device, rather than using the simple, obvious method of bending Leal's flexible
18 connections (24) -- even if one assumes that Leal's wire had been optimized with the
19 necessary balance of ductility and resilience. *MPEP § 2143.02*. Mere conclusory
20 statements by the Examiner do not establish prima facie obviousness. *KSR International Co.*
21 *v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed. 2d 705, 82 USPQ2d(BNA) 1385 (U.S. Sup.
22 Ct., 2007).

23 As the Examiner noted (and apparently conceded), Applicant pointed out in detail why
24 one of ordinary skill in the art would adjust the span size of Leal's whole spring element by
25 the most straightforward, simple, obvious, predictable method which is to bend Leal's flexible
26 connections 24 about Leal's axis of symmetry (A-A in Leal figure 1). This simple method
27 would be used rather than using the more complicated mechanism of Applicant's claims 36

5(...continued)
balance could be achieved at all, the properties of Leal's wire would have to be
optimized to simultaneously enable both the resilience that Leal specifies and the
susceptibility to ductile bending that the Examiner hypothesizes. Thus, the Examiner's
bending hypothesis fails the test for an inherent feature, and does not show that Leal
is anticipating prior art.

1 and 39.

2 As Applicant pointed out, alteration of whole spring element span size in accord with
3 Applicant's claim 36 by mutually converse alteration of Leal's u-shaped upper and lower
4 sections (12, 14) not only would be more complex and unpredictable than simply bending
5 connections 24, but also it obviously would have numerous undesirable side effects. Such
6 adverse effects include:

7 - shifting the axis of flexion of Leal's connections 24 away from Leal's axis of symmetry
8 A-A (fig. 1), thus inducing asymmetry into Leal's u-shaped upper and lower sections (12, 14)
9 and altering the fit of the device to the patient's dental arches;

10 - shifting the location of Leal's tongue depressor (26, 28, 30) relative to the axis of
11 symmetry A-A and thus relative to a patient's tongue and teeth;

12 - shifting the tabs (32, 34) into asymmetry relative to each other, thus impairing
13 compression of them with fingers;

14 - shifting the points of attachment to upper and lower sections (12, 14) by coils (40) and
15 cotton clamps (36, 38) relative to the axis of flexion (A-A) and flexible connections (24), and

16 - potentially impairing the resilience that is essential to maintain the patient's mouth
17 open.

18 Applicant's over arching point is that these obvious complications and risks of adverse
19 side effects would strongly motivate one of ordinary skill to avoid adjusting Leal's device by
20 converse changes in the loop sizes of Leal's u-shaped upper and lower sections (12, 14).
21 The Examiner evidently does not dispute that adverse effects would accrue nor dispute that
22 they would be anticipated by one of ordinary skill.

23 The Examiner's response is:

24 "Even though a process may not be the easiest and most effective way to accomplish a
25 goal does not mean **that it is not capable of it.** " Final Office Action, May 13, 2008, p.
26 4.

27 Applicant traverses this assertion. That a process "may not be the easiest and most effective
28 way to accomplish a goal" shows its **non-obviousness**.

29 The structural mechanism of adjustment stated in claims 36 and 39 is not inherent in
30 Leal for purposes of anticipation. It is not an obvious mechanism for adjusting Leal.

31
32 **ISSUE 6.** When each of Applicant's claims 33 - 36 and 39 - 42 is viewed as a whole, does
33 Leal anticipate that claim?

1 Argument Concerning Issue 6.

2 Claims must be construed as a whole, giving weight to each and all limitations. When
3 this is done, Applicant's claims are not anticipated by Leal. The Examiner has contorted
4 Leal on an element by element basis, but when one attempts to view the Examiner's various
5 contortions of Leal as a whole, the Examiner's hypotheses are unworkable. Viewed as
6 whole, Applicant's claims do not read on Leal.

7 The tests for equivalence of prior art to a means-plus-function claim for purposes of 35
8 U.S.C. § 112 are closely analogous to the tests for anticipation of an apparatus claim. The
9 Examiner has not made out a prima facie case of equivalence between Leal's device and
10 Applicant's cheek pouch anchor as claimed. *MPEP* § 2183. To be equivalent a prior art
11 element must perform the identical function specified in the claim in the same way, and
12 produce substantially the same result as the corresponding element disclosed in the
13 specification. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 54 U.S.P.Q.2d
14 (BNA)1308 (Fed. Cir. 2000). Unless an element in prior art performs the identical function
15 specified in Applicant's claim, that prior art cannot be an equivalent for the purposes of 35
16 U.S.C. § 112, sixth paragraph. *MPEP* § 2184, subd. II, citing *Pennwalt Corp. v. Durand-*
17 *Wayland, Inc.* 833 F.2d 931, 4 USPQ2d 1737 (Fed. Cir. 1987), cert. denied, 484 U.S. 961
18 (1988); overruled on other grounds *Cardinal Chem. Co. v. Morton Int'l*, 508 U.S. 83, 113 S.
19 Ct. 1967, 124 L.Ed. 2d 1 (1993).

21 The Simplicity of The Solution to A Problem Does Not Defeat Patentability.

22 When the art in question is relatively simple, as Appellant's solution is here, the
23 opportunity to judge by hindsight is particularly tempting (see *McGinley v. Franklin Sports*,
24 *supra*, 262 F.3d at 1351), so particular awareness of that risk is important here. It still is the
25 law under the U.S. Supreme Court's recent decision that an examiner must guard against
26 slipping into the use of hindsight and must guard against the temptation to read into prior art
27 the teachings of the invention in issue. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct.
28 1727, 1742, 167 L.Ed. 2d 705, 82 USPQ2d(BNA) 1385 (U.S. Sup. Ct., 2007).

29 Complexity is not a requirement for patentability. *Panduit Corporation v. Dennison*
30 *Manufacturing Co.*, 810 F. 2d 1561, 1572; 1 USPQ 2d (BNA) 1593 (Fed. Cir. 1987). It is
31 incorrect to hold that an invention was obvious when made, simply because the invention is
32 simple in nature and is easily understood when described in a patent specification.
33 Experience has shown that some of the simplest advances have been the most nonobvious.

1 *Van Veen v. United States*, 386 F.2d 462, 181 Ct. Cl. 884, 891, 156 USPQ (BNA) 403 (U.S.
2 Ct. Cl. 1967).

3 The Examiner has not offered any evidence showing why one of ordinary skill in the art
4 would modify Leal's device in a manner that would render it inoperative for Leal's stated
5 purposes, absent application by hindsight of the teaching of Appellant's invention to achieve
6 Appellant's very different objectives.

7
8 ARGUMENT RE REJECTIONS UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS.
9

10 ISSUE 7. Are Claims 37, 38 and 43, to a cheek pouch anchor in combination with a
11 capacity to carry and release a substance in a user's mouth, rendered obvious by Leal (U.S.
12 Patent 5,199,872) in view of Diaz (U.S. Patent 4.041,937)?
13

14 Argument Concerning Issue 7.

15 Claims 37, 38 and 43 combine the cheek pouch anchor with a capacity to carry a
16 substance and release that substance in the user's mouth.

17 The Examiner's rationale is that Leal anticipates all of the elements of Applicant's
18 cheek pouch anchor in claims 37, 38 and 43, except for the added element comprising a
19 capacity to carry and release a substance. The Examiner cites Diaz (U.S. Patent 4.041,937)
20 only to demonstrate that additional capacity in prior art. The Examiner does not cite Diaz to
21 cure any failure of Leal to anticipate the claimed elements of the cheek pouch anchor itself.

22 Applicant traverses, for all the reasons stated with respect to Issues 1 - 4 and 6 above,
23 the Examiner's conclusion that Leal anticipates the claimed cheek pouch anchor. If Leal
24 does not anticipate the cheek pouch anchor, then the combination of Leal with Diaz does not
25 render claims 37, 38 and 43 obvious.

26 Applicant does not raise any issue concerning the limited purpose for which the
27 Examiner cites Diaz. Applicant acknowledges that it was well known in the prior art to soak
28 a wad of cotton with a substance and attach the soaked cotton to an appliance to release
29 that substance in a user's mouth. Diaz (U.S. Patent 4.041,937) is a suitable example of that
30 technique.

31 Applicant's claims are not obvious by reason of Leal in view of Diaz because the
32 Examiner has incorrectly determined that Leal is equivalent to Applicant's claimed cheek
33 pouch anchor.

APPENDIX 1

Detailed Citations to Leal Showing the Examiner's Factually Incorrect Statements of the Structure and Function of the Leal Device.

Viewing Leal's FIG. 1, the leg portions (20, 22) of u-shaped upper and lower sections (12, 14) combined with the two resilient connections (24) of the Leal device are designed to fit simultaneously into both of a patient's cheek pouches. Leal's forwardly projecting tabs (32, 34) attach to front portions (16, 18) of Leal's device (10) evidently must project out between the patient's open lips to enable compression and release of the device by a dentist's fingers. Leal FIG. 2.

Leal states that the features of his device "provide for isolation of the operative area of the patient's mouth and ***prevents the patient from closing his mouth*** during the performance of dental work." Leal, col. 1, lines 35 - 38. Leal repeatedly states that the function of his device is to maintain a patient's mouth in an open position. Leal, col. 1, lines 6-9, lines 45 - 49, lines 60 - 61; col. 2, lines 58 - 62; col. 3, lines 8 - 13, col. 5, lines 26 - 30 ("It will be appreciated that by releasing tabs 32 and 34, the wire exerts pressure on the upper and lower jaws of the patient to maintain the mouth in an open position, while simultaneously isolating the area for dental work.") See also Leal claim 1, col. 6, at lines 29 - 34 ("... such that, upon placement of the appliance in the patient's mouth, the appliance maintains the patient's mouth in an open position, ..."); claim 10, preamble, col. 7, lines 24 - 26 and lines 44 - 50; claim 11, preamble, col. 7, lines 58 - 60 and col. 8, lines 9 - 15; claim 12, preamble, col. 8, lines 28 - 30, and lines 48 - 53.

The Examiner incorrectly states,

"Moreover, the device [of Leal] would be able to be compressed by the user's jaw and teeth if it can be compresses by two finger that are weaker than the jaw of a person, wherein the teeth would fit into the spot where the two fingers compress the device."

Office Action, Nov. 9, 2007, pp. 2 -3.

Applicant specifically traverses the Examiner's factual assertion that a user's "teeth would fit into the spot where the two fingers compress the [Leal] device." The Examiner literally is contradicting Leal's specification.

The Examiner cannot show how the Examiner's proposed mode of operation of Leal's device (compression of tabs 32 and 34 by the user's teeth and jaws) is even physically possible when Leal's device is inserted in the patient's mouth. This is because a patient's

teeth and jaws do not bear upon Leal's tabs (32, 34) when Leal's device is inserted between a user's gums and lips as Leal's specification describes.

Leal's specification describes his device as follows:

"...a frame including upper and lower generally U-shaped sections spaced in relation one to the other and generally conformal in shape to the spaces between the upper gum and lip and lower gum and lip, respectively, of the mouth of a human patient, ..." Leal, 2:62-66. "Secured to the front portions 16 and 18 of upper and lower sections 12 and 14, respectively, are a pair of **forwardly projecting** tabs 32 and 34..... The tabs 32 and 34 are U-shaped in configuration and generally bowed to accommodate the dentist's fingers, so that the tabs may be used to displace the upper and lower sections 12 and 14, respectively, toward and away from one another to facilitate insertion and removal of the appliance relative to the patient's mouth." Leal, 4:25-35.

Thus, Leal's U-shaped upper and lower sections (12, 14) are shaped to fit between the patient's gums and lips around the **outside** of the patient's dental arches, and therefore **outside the patient's teeth**. Leal's tabs (32, 34) project **forwardly** from U-shaped sections 12 and 14 and thus necessarily must lie forward of the patient's front teeth. Leal's tabs (32, 34) evidently are designed to project between the patient's lips to the outside of the patient's mouth, where the dentist can place his fingers to compress the U-shaped sections 12 and 14 for insertion into and removal from the patient's mouth. See Leal's Figs. 1, 2, 4 and 5. Leal states:

"Once inserted, the pressure on tabs 32 and 34 may be slowly released to locate the upper and lower sections, respectively, between the patient's upper gum and lips on the one hand and the lower gum and lip on the other hand." Leal, 5:19-23.

Therefore, when the Leal device is positioned in the patient's mouth as described by Leal's specification, a patient cannot bring the biting surfaces of a patient's teeth to bear on Leal's tabs 32 to 34 and the patient cannot use the biting surfaces of patient's teeth to compress Leal's tabs (32, 34).

The Examiner responded with his final assertion on May 13, 2008, as follows:

"Applicant argues that Leal's tabs (32, 34) would not contact the teeth of the user; however, the intended use is for the user's teeth not to contact the tabs; but it would be obvious that one's teeth could be able to contact the tab, depending upon the size and placement of the device. Moreover, Leal's device could be compressed by the lips of the user or by compression of the jaw when the user's closed his/her mouth." Office

1 Action mailed May 13, 2008, p. 2, second paragraph.

2 That is not obvious. Rather, the Examiner's most recent assertion directly contradicts Leal's
3 explicit statement that Leal's device **"prevents the patient from closing his mouth** during
4 the performance of dental work." Leal, col. 1, lines 35 - 38. Nothing in Leal's specification
5 states or even suggests that a patient could compress Leal's device with any part of the
6 patient's mouth, much less with a patient's lips. To the contrary, when Leal's device is
7 functioning to "prevent the patient from closing his mouth," according to Leal's stated
8 intention, the patient could not compress Leal's device with the patient's lips. A weakness in
9 the Leal device, that enabled a patient to compress the device and close the patient's mouth,
10 would be a malfunction that defeated Leal's repeatedly stated purpose to "maintain the
11 mouth open" for dental procedures.

12 Contrary to the Examiner's unexplained assertion, it is not "obvious that one's teeth
13 could be able to contact the tab, **depending upon the size and placement of the device.**"
14 (emphasis added). The Examiner's cryptic phrase "depending upon the size and placement
15 of the device" is an evasion of the Examiner's fundamental duty to provide a reasoned
16 explanation for the Examiner's decision. The Examiner has substituted the word "obvious"
17 for a reasoned mechanical analysis founded in explicitly cited prior art.

18 "Since patent examiners cannot normally be compelled to testify in legal proceedings
19 regarding their mental processes (see MPEP § 1701.01), it is important that the written
20 record clearly explain the rationale for decisions made during prosecution of the
21 application." MPEP § 706.02(j).

22 Appellant has attempted, with little success, to imagine and guess what the Examiner may
23 think is "obvious."

24 If one were to shrink the Leal device in size so that the device could be placed within a
25 patient's mouth and positioned where the patient's teeth could compress Leal's tabs 23 and
26 34, then that shrunken Leal device would have to be placed **inside the patient's dental**
27 **arches** where that shrunken Leal device would obstruct the dentist's operating field. That
28 would defeat Leal's repeatedly stated purpose to maintain the mouth in an open position to
29 expose the operating areas within the mouth. Leal, col. 1 lines 6 - 15, col. 3, lines 18 - 21. If
30 a dentist placed such a shrunken configuration of Leal where tabs (32, 34) could be
31 compressed by a patient's teeth, then Leal's device could not function equivalently to
32 Applicant's cheek pouch anchor because Leal's device then would not be in a cheek pouch,
33 but rather Leal's device would lie between the biting ("occlusal") surfaces of the patient's

1 teeth that Appellant's anchor is designed to avoid. Appellant's anchor is designed to function
2 within a cheek pouch that by definition is ***outside the user's dental arches***.

3 Applicant cannot even imagine how inflating the size of the Leal device could enable a
4 patient to bring the patient's teeth to bear on Leal's tabs (32, 34) -- and the Examiner
5 provides no hint how this could be so.

6 Applicant can imagine reversing the orientation of the Leal device, front to back, when
7 placing it into a patient's mouth so that Leal's tabs (32, 34) could be inserted between the
8 patient's teeth. That would leave most of the Leal device projecting through the patient's lips
9 and outside of the patient's mouth. Such a reversed orientation would be unstable and would
10 obstruct the dentist's access to the operating area. No person skilled in the art and using
11 common sense would do such an unreasonable thing.

12 Leal's device could not function equivalently to Applicant's cheek pouch anchor in any
13 of the shrunken, inflated, or reversed orientation configurations. Applicant cannot make
14 sense of the Examiner's unsupported assertion. It is an unreasonable, factually erroneous
15 construction of Leal's specification.
16

1
2 (viii) CLAIMS APPENDIX.

3 Claims 1 - 32 (withdrawn from prosecution per restriction requirement).
4

5 Claim 33: (Original) A cheek pouch anchor, for placement within a user's cheek pouch to
6 maintain positioning of a work piece in a user's mouth while a user's jaws, inter occlusal
7 space, and lips open and close, comprising:

8 A spring element adapted

9 - to be placed within a user's cheek pouch, and

10 - to compress as a user's jaws close, and

11 - to resiliently expand so as to form and maintain a span bridging across a user's inter
12 occlusal space and a user's lip opening formed as a user's jaws and lips open and
13 close, and

14 - to receive joinder to a work piece, and

15 having structural strength sufficient, when joined to a work piece, to maintain placement
16 within a user's cheek pouch while a user's lips and jaws open and close.
17

18 Claim 34: (Original) The cheek pouch anchor of claim 33 wherein said spring element is
19 formed of at least one of the following:

20 metal,

21 plastic,

22 resilient monofilament plastic line.
23

24 Claim 35: (Original) The cheek pouch anchor of claim 33 further comprising:

25 said cheek pouch anchor is joined with a conduit for a fluid, which conduit is adapted
26 for placement at least partially in a user's cheek pouch.

1 Claim 36: (Original) The cheek pouch anchor of claim 33 wherein said spring element
2 comprises:

3 a resilient filament

4 - which is configured into a plurality of connected loops, each loop having a loop
5 span size, and

6 -said plurality of loops are combined to form a whole spring element with a
7 whole spring element span size, and

8 - each one of said plurality of loop span sizes is mutually adjustable relative to at
9 least one other of said loop span sizes, such that an increase or decrease in the loop span
10 size of any one of said plurality of loops results in a converse decrease or increase in the
11 loop span size of at least one other of said plurality of loops,
12 thereby enabling adjustment of said whole spring element span size by said mutual
13 adjustment within said plurality of loop span sizes.

14
15 Claim 37: (Original) The cheek pouch anchor of claim 33, improved to dispense a
16 substance within a user's mouth, wherein said spring element is adapted to receive
17 impregnation or coating with a substance which is to be released in a user's mouth.

1 Claim 38: (Original) A cheek pouch anchor, for placement within a user's cheek pouch,
2 comprising:

3 A spring element adapted

4 - to be placed within a user's cheek pouch, and

5 - to compress as a user's jaws close, and

6 - to resiliently expand so as to form and maintain a span

7 --- bridging across such user's inter occlusal space as such user's jaws
8 open, and

9 --- bridging across such user's lip opening formed as such user's lips
10 open, and

11 - to receive impregnation or coating with a substance which is to be released
12 within such user's mouth,

13 whereby said spring element is enabled to maintain its placement within a user's cheek
14 pouch and to release such substance while such user's lips and jaws remain free to open
15 and close.

1 Claim 39. (Added by amendment, May 17, 2007) An adjustable cheek pouch anchor, for
2 placement within a user's cheek pouch to maintain positioning of a work piece in a user's
3 mouth while a user's jaws, inter occlusal space, and lips open and close, comprising:
4 a spring element formed of a resilient filament
5 sized to fit within a user's cheek pouch, and
6 having a dynamic span
7 that is resiliently expandable within a user's cheek pouch to maintain a bridge
8 across a user's inter occlusal space and lip opening that form as a user's jaws
9 open, and
10 that is flexibly compressible to allow a user's jaws and lips to fully close while
11 said spring element is within a user's cheek pouch, and
12 capable of receiving attachment of a work piece, and
13 having structural strength that is sufficient for said spring element to maintain itself,
14 with a work piece attached to it, within a user's cheek pouch while a user's jaws open
15 and close; and
16 said resilient filament
17 is configured into a plurality of connected loops
18 each such loop having a loop span size, and
19 each such loop span size having a range of expansion and compression, and
20 said plurality of connected loops form a whole spring element having a whole spring
21 element span size, and
22 said whole spring element span size having a range of expansion and
23 compression, and
24 said range of expansion and compression of least one of said loop span sizes of
25 said plurality of connected loops is adjustable relative to at least one other of
26 said loop span sizes, and
27 said connected loops translate an adjustment in said range of expansion and
28 compression of the loop span size of at least one of said plurality of connected loops
29 into an adjustment in said range of expansion and compression of said whole spring
30 element span size.

1 Claim 40. (Added by amendment May 17, 2007.) A cheek pouch anchor, for placement
2 within a user's cheek pouch and releasing a substance in a user's mouth, comprising:
3 A spring element
4 sized to fit within a user's cheek pouch, and
5 having a dynamic span
6 that is resiliently expandable within a user's cheek pouch to maintain a bridge
7 across a user's inter occlusal space and lip opening that form as a user's jaws
8 open, and
9 that is flexibly compressible to allow a user's jaws and lips to fully close while
10 said spring element is within a user's cheek pouch, and
11 having the capability to carry a substance, and
12 having structural strength that is sufficient for said spring element, while carrying the
13 substance, to maintain itself within a user's cheek pouch while a user's jaws open and
14 close, and
15 having the capability to release the some portion of the substance into the user's
16 mouth.

1 Claim 41. (Added by amendment Sept. 12, 2007). A cheek pouch anchor, for placement
2 within a user's cheek pouch to stabilize a work piece in a user's mouth, comprising:
3 A spring element
4 sized to fit within one of a user's cheek pouches, and
5 having a dynamic span such that
6 said spring element resiliently expands within one or more of a user's cheek
7 pouches to maintain a bridge across a user's inter occlusal space and lip
8 opening that form as a user's jaws open, and
9 said spring element flexibly compresses to allow a user's jaws and lips to fully
10 close while said spring element is within one or more of a user's cheek pouches,
11 and
12 having the capability to receive attachment to a work piece, and
13 having structural strength that is sufficient for said spring element, with a work piece
14 attached, to maintain itself within one or more of a user's cheek pouches while a user's
15 jaws open and close.


16
17 Claim 42. (Added by amendment Sept. 12, 2007). A cheek pouch anchor as in claim 41,
18 further comprising:
19 said cheek pouch anchor is joined with a conduit for a fluid, which conduit is configured
20 to enable placement of it at least partially in one or more of a user's cheek pouches.

1 Claim 43. (Added by amendment Sept. 12, 2007) A cheek pouch anchor, for placement
2 within a user's cheek pouch and releasing a substance in a user's mouth, comprising:
3 A spring element
4 sized to fit within one of a user's cheek pouches, and
5 having a dynamic span such that
6 said spring element resiliently expands within one or more of a user's cheek
7 pouches to maintain a bridge across a user's inter occlusal space and lip
8 opening that form as a user's jaws open, and
9 said spring element flexibly compresses to allow a user's jaws and lips to fully
10 close while said spring element is within one or more of a user's cheek pouches,
11 and
12 having the capability to carry a substance, and
13 having structural strength that is sufficient for said spring element, while carrying the
14 substance, to maintain itself within one or more of a user's cheek pouches while a
15 user's jaws open and close, and
16 having the capability to release a portion of the substance into the user's mouth.

1 (ix) EVIDENCE APPENDIX. There is no evidence separate from the application.

2
3 (x) RELATED PROCEEDINGS APPENDIX. There are no related proceedings.

4
5
6
7 July 7 , 2008

A handwritten signature in black ink, reading "Lowell R. Wedemeyer". The signature is written in a cursive, flowing style with a large initial 'L'.

Lowell R. Wedemeyer, Applicant

8 Reg. No. 32,010